IV.9 NATIVE AMERICAN INTERESTS

The programmatic analysis in this chapter addresses potential impacts to tribal interests from implementation of the Desert Renewable Energy Conservation Plan (DRECP) and Bureau of Land Management (BLM) Proposed Land Use Plan Amendment (LUPA). Covered Activities in this analysis are described for each DRECP alternative in this report (see Volume II for descriptions of Development Focus Areas [DFAs] and Variance Process Lands). The primary consideration in quantifying tribal impacts at this programmatic level of analysis is the extent to which the tribal concerns described in Volume III, Chapter III.9, Native American Interests, intersect with, and are affected by, proposed DFAs, renewable energy projects, and conservation lands within the LUPA Decision Area.

Appendix R2.9 includes 18 tables supporting this chapter. The tables present data that estimate the number the number of acres of the California Desert Conservation Area (CDCA)-designated Native American Elements (NAEs) and of cultural resources (data available only for archaeological and built-environment resources) that might be impacted by the different components and technology types for each alternative. These tables present these numbers by ecoregion subarea and technology type (solar, wind, geothermal, and transmission). The number of NAE acres and estimated resources in DRECP component lands (conservation lands, Variance Process Lands, and DFAs [Available Development Areas for No Action Alternative]) are also represented. Specific supporting tables are referenced in each section that follows.

IV.9.1 Approach to Impact Analysis

Tribal interests are associated with the process of environmental review, permitting, and mitigation under (1) the National Environmental Policy Act (NEPA), (2) Section 106 of the National Historic Preservation Act (NHPA), (3) Native American Graves Protection and Repatriation Act (NAGPRA), (4) Executive Order 12898 (Environmental Justice), (5) Executive Order 13007 (Indian Sacred Sites), (6) the Bald and Golden Eagle Protection Act, and (7) impacts to the physical world. Process concerns include consultation, ethnography, document review, confidentiality, monitoring, repatriation, access, and Environmental Justice. Physical-world concerns focus on physical resources, items, or places of concern to tribes, including cultural and natural resources. See Chapters III.8 and III.9 for more details.

These broad interests share the perspective that the whole of a landscape is interconnected and imbued with a life force. Large-scale, landscape-focused analyses for tribal concerns have been supported by recent federal and state policies. The Solar Programmatic Environmental Impact Statement (Solar PEIS), published by BLM in 2012, included chapters on California tribal concerns, including a section describing traditional cultural properties and a landscape

perspective for the analysis of cultural resources in a manner consistent with tribal perspectives (BLM 2012, Volume 3, Part 1, Section 9.1.18, Native American Concerns).

The Department of the Interior (DOI) Secretary issued Secretarial Order No. 3330 on October 31, 2013, in which DOI agencies were directed to "avoid potential environmental impacts from projects through steps such as advanced landscape-level planning that identifies areas suitable for development because of relatively low natural or cultural resource conflicts" (Secretarial Order 3330 2013). In April of 2014, the Energy and Climate Change Task Force issued its report, *A Strategy for Improving the Mitigation Policies and Practices of The Department of the Interior* (USDOI 2014). This report highlights the challenges and opportunities associated with developing and implementing an effective mitigation policy. It also describes the key principles and actions necessary to successfully shift from project-by-project management to consistent, landscape-scale, science-based management of DOI lands and resources. Similarly, the California Office of Historic Preservation has specifically called out a need for cultural resources professionals working on renewable energy projects to shift focus from the site level to the landscape level of assessment (OHP 2013).

IV.9.1.1 General Methods

As discussed in Section III.9.4, two broad areas of concern to those tribes potentially affected by decisions in the LUPA Decision Area and DRECP area have been identified: physical world concerns and process concerns. Physical world concerns include impacts to cultural resources (including traditional cultural properties and landscapes), human remains, and natural resources. Section III.9.4.2, discusses physical concerns in more detail. Process concerns include environmental review, permitting, and mitigation under NEPA and Section 106 of the NHPA and the role of Native Americans in that process. Process concerns are discussed in more detail in Section III.9.4.1. In analyzing potential impacts of concern to tribes, this section uses a combination of several quantitative and qualitative techniques. This approach combines methods developed specifically for the DRECP area, cultural resources methods, and environmental justice methods. This section also discusses the limitations of these methods.

First, NAEs were identified as "concentrated, sensitive areas of traditional Native American secular and religious uses." The BLM originally developed maps representing NAEs and their locations within and in relation to traditional tribal territories, traditional use areas, and Areas of Critical Environmental Concern (ACECs) in 1980 as part of the CDCA Plan. These sensitive locations are relevant to both the contemporary and traditional concerns of Native Americans and organized tribal governments (BLM 1980[a]). This chapter presents maps based on these original NAE maps, but the new maps add the LUPA decision area, DRECP boundaries, the CDCA, and DRECP elements (e.g., DRECP ecoregion subareas, DFAs,

and Conservation Lands). The NAEs are considered to be especially sensitive to impacts associated with renewable energy development in the LUPA Decision Area and DRECP area. As such, an alternative where DFAs overlap with a larger number of NAE acres is considered to have a greater impact than an alternative that overlaps with a smaller number of NAE acres.

Tables in Appendix R2.9 present details on the number of acres of the CDCA-designated NAEs that could be impacted by the different components and technology types for each alternative. These tables present the acres of NAEs by DRECP ecoregion subarea per alternative and number of acres impacted by technology type (solar, wind, geothermal, and transmission). Acres of NAEs in DRECP area lands (conservation lands, Variance Process Lands, and DFAs [Available Development Areas for No Action Alternative]) are also represented. Each section in the analysis references specific tables.

Second, this analysis assumes that tribal communities are also interested in cultural resources, which may or may not have been included in NAEs. Therefore, in addition to NAE acres, this analysis also considers estimates of the numbers of cultural resources within DFAs and the conservation designation lands, which were central to the Cultural Resources (IV.8) impact analysis. The methods used to calculate these estimates are described in detail in Section IV.8.1.1. Tables in Appendix R2.8 present the estimated number of resources that could be impacted by the different components and technology types for each alternative. In this quantitative analysis, an alternative which impacts a larger estimated number of resources is considered to have a greater impact than an alternative that impacts a smaller number of estimated resources. It should be noted that based on how the data was collected, resources that are likely to be more of interest to tribes, such as prehistoric archaeological sites, cannot be distinguished from other resources, such as historic archaeological sites and built-environment resources. In addition, these calculations do not include other kinds of resources that are especially of interest to tribes: traditional cultural properties and cultural landscapes.

The two methods described above attempt to identify potential physical world impacts. The identification of impacts associated with process concerns uses cultural resources concepts and an adaptation of environmental justice methods. As discussed in Section III.9.2, developing methods for environmental justice analyses has been challenging. The key issue is the concept of "disproportionate impact." Despite years of effort, a nationally consistent definition of disproportionate impact and the variables that should be measured, have not been identified. The utility of a single definition has been challenged because not all disproportionately impacted communities share one singular experience of injustice. Standard tools tend to focus on impacts to health due to air pollution and overlook other environmental concerns. Of particular relevance for the current analysis,

standard tools do not accommodate qualitative data or the distinctive concerns on traditional tribal territories (Holifield 2014).

justice concerns of minorities and low-income populations living in the DRECP area, including Native Americans, are analyzed in Chapter IV.23 using census tract demographic data provided in Appendices R1.23 and R2.23. The analysis seeks to identify whether these populations are distributed disproportionately within the LUPA Decision Area and DRECP area, or if either would introduce any proposed land use designations whose negative impacts could be disproportionately borne by minority or low-income populations. See Section IV.23.3 for more information regarding the results of this analysis.

The analysis in this section is more focused and attempts to address some of the concerns identified by Holifield (2014). As discussed in Section III.9.2, communities that could be impacted by the Proposed LUPA and DRECP are defined in the current analysis as all tribes and Native American organizations with traditional affiliations in the LUPA Decision Area and the DRECP area, regardless of the residence of each member. The analysis is focused on types of disproportionate impacts: damage to cultural connections to landscapes, damage to the perpetuation of the generations, and financial stress on tribal government services. Therefore, renewable energy development within NAEs and cultural landscapes could be considered an adverse impact from environmental justice perspective. As a result of their historical ties to the LUPA Decision Area and the DRECP area and their unique legal relationship with the federal government, some tribal communities may be disproportionately impacted through their participation in the NEPA and Section 106 process. The inability of a tribal community to participate in the environmental review of all proposed projects of interest to their members because of stress on community services would be considered an adverse impact.

The methods described above have limitations. First, the CDCA-designated NAE areas and estimates about the number of cultural resources that might be impacted, while important, do not represent a complete list of places or areas important to tribes or the total impacts anticipated. It would be necessary to conduct additional research, consultation, and meaningful engagement with affected tribal communities on a project-specific level to identify additional areas of concern and importance. Second, NAEs may or may not contain cultural resources of interest to tribes, resulting in an overlap between these analytical categories. Third, there may be a distinction in terms of the perception of impacts to resources important to tribal communities. Typically, analysis in environmental documents is undertaken on a primarily quantitative level (i.e., the preferred alternative is usually the one that affects the fewest resources). However, this method may not account for tribal concerns and perspectives. The traditional tribal world-view may consider the cultural and spiritual value of the resource and not the total number of impacted resources. For example, some tribes may consider that an adverse impact to two resources is as severe as

an impact to 40 resources. As a result, a distinction between alternatives based on a standard metric may not be relevant for resources of concern to tribes because any potential development that would impact resources is considered equally negative.

The accurate evaluation of potential impacts on tribal values can only be made within the cultural context from which those values are derived (BLM 1980, NAE). The thresholds for identifying resources of interest to tribes and impacts to those resources depend on close coordination, communication, collaboration and formal consultation with tribes. With the participation of tribal governments and individuals, agency staff can make better determinations.

IV.9.2 Typical Impacts Common to All Action Alternatives

Impacts to resources of tribal concern would be addressed on a project-specific basis in supplemental NEPA and NHPA Section 106 processes for evaluation of renewable energy and transmission projects. These projects would require project-specific environmental review that would address site-specific impacts to resources of tribal concern as part of the approval process. These impacts would be discussed in government-to-government consultation between the lead agency(ies) and the tribal government(s). Consideration of resources of tribal concern is based on typical impacts from renewable energy development. Impacts to resources of tribal concern are similar to those of cultural resources and environmental justice. Therefore, impact analysis for resources of tribal concern is based on typical cultural resources impacts from renewable energy developments. However, environmental justice impacts in this analysis are focused on the cultural and spiritual concerns of Native Americans as they relate to the LUPA Decision Area and DRECP area environment and to the cost burden, which tribal governments and organizations bear during the NEPA and Section 106 process. Tribes affiliated with project areas through ancestral or traditional-use claims constitute environmental justice populations. Tribal people maintain long-standing ancestral and traditional-use practices and concepts connected to the environment and to their identities as Indian people. Other environmental justice concerns, such as health, are addressed in Section IV.23.

Impacts to resources of tribal concern are considered actions that result in:

- Physical destruction, damage, or alteration to all or part of the significant cultural resource.
- Isolation of the cultural resource or alteration of the character of the resource's setting when that character contributes to the resource's qualifications for the National Register of Historic Places (NRHP).

- Introduction of visual, audible, olfactory, or atmospheric elements that are out of character with the resource or changes that may alter its setting.
- Disproportionate impacts to places that are linked to tribal collective identities.
- Disproportionate impacts to places that play an essential role in the perpetuation of the generations.

While impacts to resources of tribal concern would be discussed on a project-specific basis, development for solar, wind, and geothermal projects and their associated transmission lines share many of the same types of impacts. Certain activities associated with energy development have a greater potential for adversely affecting resources of tribal concern than others. Earthmoving activities (e.g., grading and digging) may have the highest potential for disturbing or destroying these resources; however, pedestrian and vehicular traffic and indirect impacts of earthmoving activities, such as soil erosion, may also have an effect. Visual, auditory, and olfactory impacts on resources of tribal concern may also occur. Many resources of tribal concern are nonrenewable and, once damaged or destroyed, may not be recoverable.

Impacts associated with tribal process concerns include those that place disproportionate stress upon services offered by tribal governments and organizations to their members. In particular, this includes stress on those individuals and departments that participate in NEPA and Section 106.

IV.9.2.1 Impacts of Renewable Energy and Transmission Development

This section describes the potential effects of all Proposed LUPA and DRECP components on resources of cultural and spiritual importance to tribes, including site characterization, construction and decommissioning, and operation and maintenance.

IV.9.2.1.1 Impacts of Site Characterization

Activities associated with preconstruction site characterization for renewable energy development generally require relatively little ground disturbance when compared with what might actually be constructed on a proposed project site, so these activities are unlikely to result in destruction of or physical damage to resources of tribal concern. However, site characterization activities could include geotechnical borings, installation of temporary meteorological towers, installation of security measures and fencing, access roads, and staging areas. These activities could impact resources of tribal concern.

IV.9.2.1.2 Impacts of Construction and Decommissioning

Site construction activities have the greatest potential to impact resources of tribal concern because of the increased ground disturbance during this phase. Resources of tribal concern could be impacted in several ways, including the following:

- Disturbance or degradation could result from the vegetation clearing, boring, grading, trenching, and excavation of a project-specific area. Disturbance or degradation could also result from construction of solar panels, wind turbines, geothermal production and injection wells, well field pipelines, meteorological stations, facilities and associated infrastructure, including generator tie-lines, access roads, spur roads, transmission lines, temporary staging and construction areas, and temporary access routes. Revegetation activities after construction can also impact resources of tribal concern, particularly sacred areas or areas used for harvesting traditional resources.
- Degradation and destruction could result from the alteration of topography, alteration of hydrologic patterns, removal of soils, erosion of soils, runoff into and sedimentation of adjacent areas, and oil or other contaminant spills if resources are on or near a project-specific area. Such degradation could occur both within the project footprint and in areas downslope or downstream. Agents of erosion and sedimentation include wind, water, downslope movements, and human and wildlife activities.
- Increases in human access and subsequent disturbance of resources of tribal concern could result from the establishment of corridors or facilities in otherwise intact and inaccessible areas. Increased human access exposes these resources to a greater probability of impacts. These impacts include off-highway vehicle tracks, looting, unauthorized collection of artifacts, vandalism, trampling, and inadvertent destruction of unrecognized resources.
- Visual degradation of settings associated with resources of tribal concern could result from the presence of a renewable energy development and its associated land disturbances and ancillary facilities. Large areas of exposed ground surface, increased dust, and the presence of large-scale machinery, equipment, and vehicles could contribute to an adverse impact.

Differences in water use and discharge among the solar technologies are not likely to be a factor in determining levels of impact of surface runoff and possible effects on resources of tribal concern. However, depending on the source of water for solar technologies using cooling towers or steam generators, drawdown of surface water levels could increase the potential for erosion in some localities and inadvertently expose resources of tribal

concern along stream banks or lakeshores. Changes in water levels could result in changes to native vegetation (see Chapter IV.7, Biological Resources, and Chapter IV.5, Flood, Hydrology and Drainage), which could affect traditional gathering locations or traditional cultural properties (including golden eagle nesting and foraging habitat). Land subsidence as a result of withdrawing groundwater could also impact resources of tribal concern.

Impacts specific to geothermal energy development are related to visual and sensory issues. If hot springs of tribal significance are near the geothermal wells, the temperature and water level of the hot springs may be affected by drilling operations. If the pipelines required from wells are constructed above ground on steel supports, they could result in a visual impact to tribal resources. In addition, as wells are depleted, replacement wells may need to be drilled to supply enough geothermal fluid and sufficient temperature to maintain the power capacity.

Site decommissioning, reclamation, and abandonment would have the fewest impacts if ground disturbance is confined to the original disturbance during construction. If additional work areas were needed beyond those disturbed during construction, new impacts could be similar to those that would occur during construction. Visual impacts on tribal resources would be mostly removed after decommissioning as long as the site was restored to its preconstruction state. However, despite the physical removal of equipment and facilities, the impact of a scarred environment would remain in an area sacred or important to tribes or important to other Native American communities. If access roads are left in place, the potential for looting and vandalism would also remain and might even increase because the area may no longer be periodically monitored by an operator.

IV.9.2.1.3 Impacts of Operations and Maintenance

Fewer physical impacts to tribal resources would occur from the operation and maintenance of renewable energy developments, although the duration of visual, auditory, and olfactory effects can be long-lasting but may be limited to the length of project operations. Visual degradation of settings associated with tribal resources could result from the presence of a renewable energy development and associated land disturbances and ancillary facilities. Golden eagles, which some tribes consider sacred, may be killed by operation of wind energy and solar thermal facilities.

IV.9.2.2 Impacts of the Ecological and Cultural Conservation Recreation Designations

No renewable energy development is allowed in Ecological and Cultural Conservation Recreation Designations. Therefore, impacts on tribal resources resulting from Ecological and Cultural Conservation Recreation would be primarily beneficial if resources are

preserved and to some extent could offset the adverse effects of renewable energy development. However, historic properties are unique and nonrenewable; therefore, protecting historic properties in conservation designations as an offset to impacts elsewhere does not eliminate adverse effects to other historic properties. Additionally, allowable activities that require ground-disturbing activities, like digging holes for plants, could adversely impact cultural resources.

Because LUPA land designations would be managed to protect ecological, historic, cultural, scenic, scientific, and recreation resources and values, they would also confer general protection for tribal resources. While other land uses are allowed within these areas, those other uses must be compatible with the resources and values that the land designation is intended to protect.

Impacts on tribal resources resulting from designations of ACECs, National Landscape Conservation System (NLCS) lands (also referred to as National Conservation Lands), and wildlife allocations would likely be beneficial as a result of disturbance caps in these areas designed to conserve and protect the resource values. These disturbance caps and other management actions would minimize soil disturbance, erosion, and other adverse impacts, and thereby provide protection for tribal resources. However, some habitat restoration activities could result in ground disturbance and damage to tribal resources.

Details on allowable uses and management within NLCS lands are presented in the Proposed LUPA description in Volume II. Details on the goals, objectives, allowable uses, and management actions for each ACEC and Special Recreation Management Area (SRMA), Extensive Recreation Management Areas (ERMA), are presented in Section II.3.4, Goals and Objectives and Conservation Management Actions (CMAs). To the extent SRMAs are designated, increased accessibility to areas with tribal resources could lead to looting or vandalism.

IV.9.3 Impact Analysis by Alternative

The following sections present impact analysis for the No Action Alternative, the Preferred Alternative, and Alternatives 1 through 4 in the DRECP area only. Each alternative is then compared with the Preferred Alternative. The differences among alternatives include:

- The number of NAE acres conserved or potentially impacted by development.
- The number of estimated cultural resources conserved or potentially impacted by development.
- The cultural resources CMAs tied to Section 106 of the NHPA, specifically associated with NLCS lands.
- The width of National Scenic and Historic Trail (NSHT) corridors within NLCS lands.

The number of cultural resources estimated for the entire DRECP area does not change per alternative but rather the boundaries and acreages change. Therefore, the higher the acreage, the more cultural resources are estimated to be impacted or conserved.

IV.9.3.1 No Action Alternative

The No Action Alternative assumes the state's renewable energy goals would be achieved without the Proposed LUPA and this EIS and that renewable energy, transmission development, and mitigation for such projects in the LUPA Decision Area would occur on a project-by-project basis in a pattern consistent with past and ongoing renewable energy and transmission projects.

Any areas currently excluded from development by statute, regulation, or proclamation would retain those exclusions. Any areas that are administratively excluded would continue to be assessed based on management guidance within BLM local field office land use plans. Without the Proposed LUPA, renewable energy development would likely continue without overarching guidance, ultimately resulting in the increased likelihood of cumulative impacts to resources of concern to tribes within the LUPA Decision Area.

Under the No Action Alternative, existing land management plans within the LUPA Decision Area (California Desert Conservation Area [CDCA] Plan, as amended; Caliente Resource Management Plan [RMP], and Bishop RMP) would continue to allow for renewable energy and transmission development within certain land designations, including Solar Energy Zones (SEZs) and Solar Variance Lands. Individual projects would continue to require individual land use plan amendments prior to their approval if they are sited outside of SEZ and Solar Variance Lands.

The No Action Alternative could impact culturally important resources on approximately 8,131 acres of NAE designated lands if renewable energy development were to occur in these designated areas or in locations close enough to indirectly affect NAE areas.

Table R2.8-3 presents the estimated number of archaeological and built-environment resources within the No Action Alternative's available development areas on BLM lands. The largest number of (1,963) archaeological and built-environment resources could be affected by solar energy projects. TCPs and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a qualitative manner in this document.

Table R2.8-4 presents the estimated number of archaeological and built-environment resources within existing ACECs and SRMAs. The model shows 51,332 resources within existing SRMAs and 87,317 resources within existing ACECs. Existing ACECs and wildlife

allocations would continue to protect all types of cultural resources because of their disturbance limitations.

IV.9.3.1.1 Impacts of Renewable Energy and Development in No Action Alternative

Under the No Action Alternative, there are approximately 2,804,000 acres that could be developed within the boundaries of the DRECP area. This figure includes only BLM land. Impacts to resources of concern to tribes from this scale of development would be substantial and would be distributed across the DRECP area. Impacts for the LUPA Decision Area were not calculated, but are expected to be similar.

The impacts to resources of concern to tribes in various areas under the No Action Alternative are discussed in the following paragraphs.

Issues of concern to tribes related to renewable energy development can be separated into two broad categories, physical-world resources and concerns related to the process of the development of renewable energy projects, as defined in Volume III, Section III.9.4.1. The distinction between resources of cultural importance as opposed to ones that are spiritual in nature is not one typically made by tribal people, and therefore no distinction is made here.

Impact TL-1: Disproportionate effect on resources of cultural and spiritual importance to tribes.

Physical-World Resources. All phases of development activities under the No Action Alternative could impact physical-world resources important to tribes (i.e., cultural resources, natural resources, and tribal gathering areas).

Figure IV.9-1, Native American Element (Identified in the 1980 CDCA Plan), No Action Alternative, illustrates the location of NAEs and the components of the No Action Alternative. As described in Section IV.9.1.1, General Methods, the NAE maps were originally developed by BLM in 1980 as part of the CDCA Plan to show "concentrated, sensitive areas of traditional Native American secular and religious uses" (BLM 1980b: NAE). While important, CDCA-designated NAE areas do not represent a complete list of places or areas important to tribes. The No Action Alternative could impact culturally important resources on approximately 8,131 acres of NAE designated lands if renewable energy development were to occur in these designated areas or in locations close enough to indirectly affect NAE areas.

As discussed in Archival Methodology in Section III.8.3, cultural resource density was calculated from the number of known cultural resources divided by the number of acres surveyed within each ecoregion subarea. Because only a fraction of the LUPA Decision Area

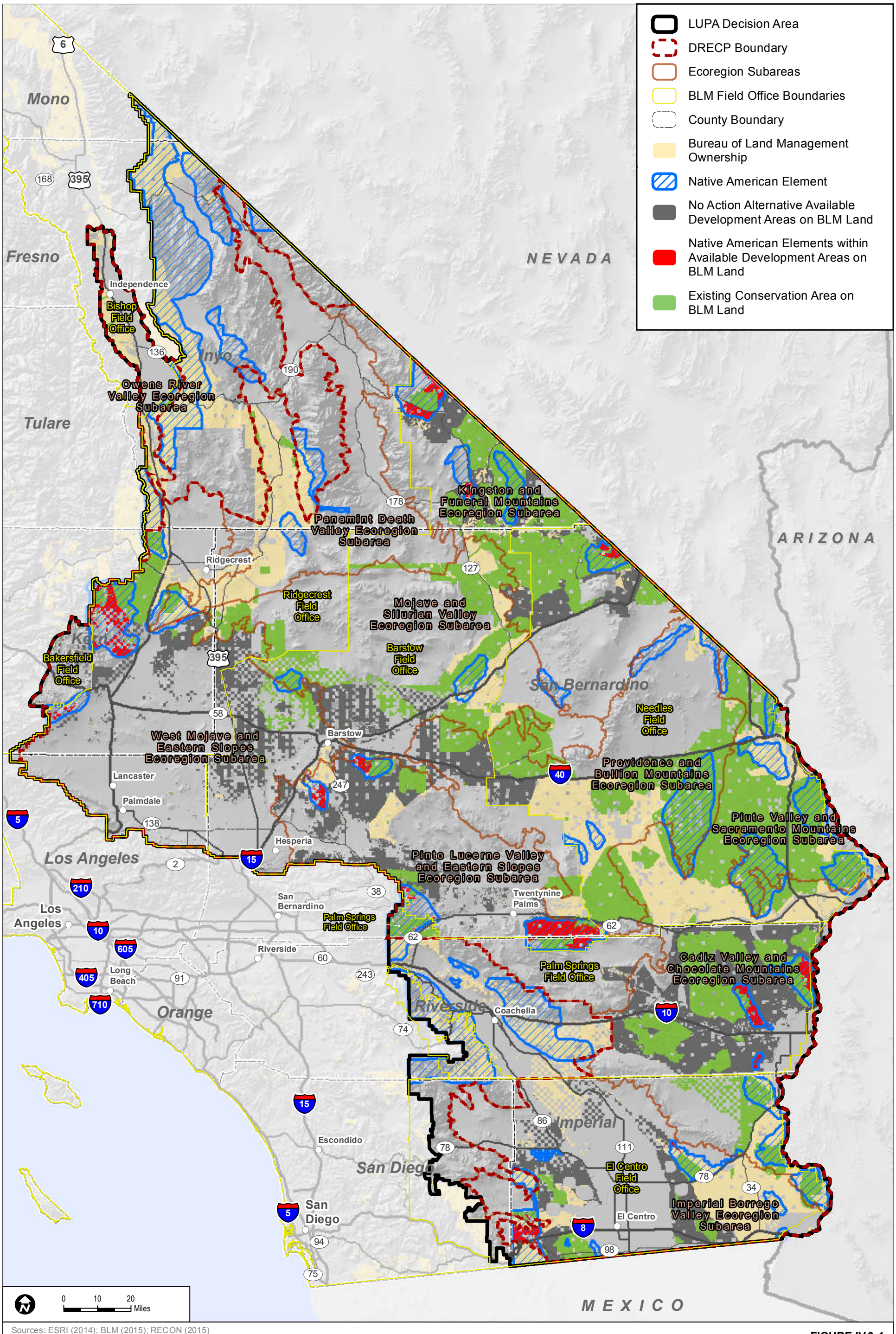
has been surveyed, the actual number of cultural resources is most likely under-represented. These density calculations suggest that approximately 4,077 cultural resource sites may be present and could be impacted (Appendix R2; Section R2.8, Cultural Resources; Table R2.8-3). Figure IV.8-1 (in Chapter IV.8, Cultural Resources) shows the estimated number of cultural resources within the ADA by DRECP ecoregion subarea. The largest number of (1,963) archaeological and built-environment resources could be affected by solar energy projects. While NAE designated lands and cultural resource sites are important, the metrics listed above do not represent a complete list of places or areas important to tribes in the LUPA Decision Area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are taken into account.

Impact TL-2: Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations.

Process-Related Concerns. Section III.9.4.1 identifies issues of concern to tribes as they relate to the process of renewable energy development and environmental review. These issues include consultation, ethnography, document review, confidentiality, monitoring, repatriation, access, and environmental justice. The Proposed LUPA identifies methods and best practices for consulting with and engaging tribes in meaningful dialogue in an effort to reach mutually agreeable outcomes regarding all phases of project development and potential impacts and treatment of resources important to tribes. Under the No Action Alternative, these methods and best practices may not be identified, thus increasing the potential for greater impacts from future projects.

Design Features from the Solar Programmatic Environmental Impact Statement

In addition to the regulations described previously, several design features identified in BLM's Solar PEIS are in effect now within the LUPA Decision Area for solar projects. These design features help avoid or minimize impacts to cultural resources and tribal concerns prior to the development of project specific mitigation measures. These design features would help avoid, minimize, or mitigate potential impacts on cultural resources and tribal concerns. They are presented by project phase or activity: (1) general design features; (2) site characterization, siting and design, and construction; (3) operations and maintenance; and (4) reclamation and decommissioning (Appendix W). These are identified and discussed in Sections 5.16.1 and 5.16.2 of the Draft and Final Solar PEIS and are presented as direct quotes in this document. Design features related to cultural resources may also be relevant to Native American concerns. These were identified and discussed in Sections 5.15.1 and 5.15.2 of the Draft and Final Solar PEIS.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-1

Native American Element (Identified in the 1980 CDCAP), No Action Alternative

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-1.mxd 9/18/2015

INTENTIONALLY LEFT BLANK

General Design Features

NA1-1 BLM shall consult with federally recognized Indian tribes early in the planning process to identify issues and areas of concern regarding any proposed solar energy project as required by the National Historic Preservation Act (NHPA) and other authorities to determine whether construction and operation of a project is likely to disturb traditional cultural properties or sacred sites, impede access to culturally important locations, disrupt traditional cultural practices, affect movements of animals important to tribes, or visually affect culturally important landscapes.

a. Identifying issues and areas of concern to federally recognized Indian tribes shall include, but is not limited to, the following:

- Covering planning, construction, operation, and reclamation activities during consultation. Agreements or understandings reached with affected tribes shall be carried out in accordance with the terms of MOAs or State Specific Procedures as defined within the Solar PA [Programmatic Agreement].
- BLM consulting with affected Indian tribes during the Section 106 process at the points specified in the Solar PA.
- BLM consulting with Indian tribes under the terms of the Native American Graves Protection and Repatriation Act (NAGPRA). Any planning for treatment of historic properties or mitigation will take such consultations into account.
- BLM seeking, during consultation, to develop agreements with affected tribes on how to appropriately respond to input and concerns in advance to save time and avoid confusion.

b. Methods to minimize issues and areas of concern to federally recognized Indian tribes may include, but are not limited to, the following:

- Employing standard noise design features for solar facilities located near sacred sites to minimize the impacts of noise on culturally significant areas.
- Employing health and safety design features for the general public for solar facilities located near Native American traditional use areas in order to minimize potential health and safety impacts on Native Americans.

- Avoiding known human burial sites. Where there is a reasonable probability of encountering undetected human remains and associated funerary objects by a solar energy project, BLM will carry out discussions with Indian tribes before the project is authorized, in order to provide general guidance on the treatment of any cultural items (as defined by NAGPRA) that might be exposed.
- Avoiding visual intrusion on sacred sites through the selection of the solar facility location and solar technology. When complete avoidance is not practicable or economically feasible, BLM shall engage in timely and meaningful consultation with the affected tribe(s) and shall attempt to formulate a mutually acceptable plan to mitigate or reduce the adverse effects.
- Avoiding rock art (panels of petroglyphs and/or pictographs). These panels may be just one component of a larger sacred landscape, in which avoidance of all impacts may not be possible. Mitigation plans for eliminating or reducing potential impacts on rock art shall be formulated in consultation with the appropriate tribal cultural authorities.
- Avoiding springs and other water sources that are or may be sacred or culturally important. If it is necessary for construction, maintenance, or operational activities to take place in proximity to springs or other water sources, appropriate measures, such as the use of geotextiles or silt fencing, shall be taken to prevent silt from degrading water sources. The effectiveness of these mitigating barriers shall be monitored. Measures for preventing water depletion impacts on springs shall also be employed. Particular mitigations shall be determined in consultation with the appropriate Indian tribe(s).
- Avoiding culturally important plant species. When it is not possible to avoid affecting these plant resources, consultations shall be undertaken with the affected Indian tribe(s). If the species is available elsewhere on agency-managed lands, guaranteed access may suffice. For rare or less-common species, establishing (transplanting) or propagating an equal amount of the plant resource elsewhere on agency-managed land accessible to the affected tribe may be acceptable (e.g., for mesquite groves and rice grass fields, identified as tribally important plant species in the ethnographic studies).
- Avoiding culturally important wildlife species and their habitats. When it is not possible to avoid these habitats, solar facilities shall be

designed to minimize impacts on game trails, migration routes, and nesting and breeding areas of tribally important species. Mitigation and monitoring procedures shall be developed in consultation with the affected tribe(s).

- Securing a performance and reclamation bond for all solar energy generation facilities to ensure compliance with the terms and conditions of the ROW authorization. When establishing bond amounts and conditions, the BLM authorized officer shall require coverage of all expenses tied to identification, protection, and mitigation of cultural resources of concern to Indian tribes. These may include, but are not limited to, costs for ethnographic studies, inventory, testing, geomorphological studies, data recovery, curation, monitoring, treatment of damaged sites, and generation and submission of reports (see ROW authorization policies, Section 2.2.1.1 of the Final Solar PEIS).

Site Characterization, Siting and Design, Construction

NA2-1 Prior to construction, the project developer shall provide training to contractor personnel whose activities or responsibilities could affect issues and areas of concern to federally recognized Indian tribes.

Operations and Maintenance

NA3-1 Consultation with affected federally recognized Indian tribes shall be ongoing during the life of the project.

NA3-2 The project developer shall train facility personnel regarding their responsibilities to protect any known resources of importance to federally recognized Indian tribes.

Reclamation and Decommissioning

NA4-1 The project developer shall confine reclamation and decommissioning activities to previously disturbed areas and existing access roads to the extent practicable.

NA4-2 The project developer shall return the site to its pre-construction condition, to the extent practicable and approved by BLM.

Typical Mitigation Measures

Effective and comprehensive mitigation measures for impacts to resources of tribal concern can only be accomplished on a project-specific level through formal consultation and engagement with affected tribal communities. For projects subject to Section 106 of the NHPA, the SHPO/THPO would also be a party to this consultation and the resulting mitigation measures would be memorialized in a Memorandum of Agreement. Under the No Action Alternative, these project-specific consultation efforts would occur as they have in the past but without the guidance provided regarding consultation in the Proposed LUPA. Examples of mitigation measures applicable to any project implemented in the absence of a Plan approval include:

- Employing mitigation measures to reduce impacts as a result of noise, health and safety concerns, traffic, and air quality.
- Complying with federal laws and regulations to produce an agreement document (e.g., Memorandum of Agreement) that would include mitigation measures for the treatment of any NRHP-eligible cultural resources identified.
- Developing a treatment plan for the unanticipated discovery of cultural resources during *all* phases of project development, including procedures for uncovering human remains or suspected human remains including associated funerary objects, sacred objects, and objects of cultural patrimony in accordance with applicable laws and regulations, including the Native American Graves Protection and Repatriation Act (NAGPRA) and BLM Instruction Memorandum No. CA-2010-024.
- Training project personnel to educate them regarding the importance of cultural resources, as well as procedures for avoiding cultural resources and reporting any culturally sensitive resources.
- Using tribal monitors during surveys and ground-disturbing activities.
- Providing training for tribal personnel in the field of cultural resource management and environmental science, such as NHPA Section 106 and NEPA training.
- Issuing educational scholarships for tribal communities.
- Conducting archaeological or other cultural resource analyses.
- Conducting biological and hydrologic studies.
- Developing educational curricula to be used in local school settings.
- Conducting public educational outreach, such as kiosks or museums, regarding impacted tribal concerns.

- Offering land exchanges that can provide valuable assets, both cultural and financial, for a tribe to mitigate the loss of assets.
- Establishing conservation easements where individual resources could be preserved.
- Treating the surfaces of introduced materials to reduce the visual impact of such materials.
- Using specific lighting design and operations to reduce impacts to night-sky viewing.
- Avoiding and buffering critical habitat areas, vegetation stands, and nesting areas.
- Restricting the introduction and disposal of any non-native species into areas of native habitat, suitable habitat, and natural or artificial bodies of water.
- Directing nighttime lighting away from animal habitats and shield light downward.
- Implementing construction standards that would prevent toxic chemicals from entering waterways, minimizing the chance of hazardous spills, and implementing measures to prevent excessive and man-made soil deposition and erosion.
- Addressing impacts to cultural resources at a landscape scale following the guidance in *A Strategy for Improving Mitigation Policies and Practices of the Department of the Interior* (USDOI 2014), including:
    - Compensatory mitigation.
    - Coordination with other agencies.
    - Measures to monitor and evaluate the progress of long-term mitigation.
    - Development and maintenance of geospatial information systems for use in identifying existing and potential conservation strategies and development opportunities.

IV.9.3.1.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

The No Action Alternative has no new conservation designations. Without approval of an action alternative, protection of existing Legislatively and Legally Protected Areas, such as wilderness areas, would continue. In addition, under the No Action Alternative, renewable energy projects would continue to be evaluated and approved with project-specific mitigation requirements.

Under the No Action Alternative, approximately 59% of the NAEs (1,310,098) identified on BLM lands in the 1980 CDCA (2,214,756 acres) are within existing BLM-protected lands or BLM land designations (such as ACECs) (Table R2.9-1 Appendix R2). While these do not represent a complete list of places or areas important to tribes, renewable resource

developments within these lands would be reviewed on a project-by-project basis. Renewable energy development in these land designations, and any resultant impacts to cultural resources, would be reviewed on a project-by-project basis. If individual projects approved under the No Action Alternative resulted in the establishment of new conservation lands, cultural resources in those areas likely would be protected from disturbance. Under the No Action Alternative, the BLM would not establish management corridors for National Historic Trails. The routes of these trails as they cross the LUPA Decision Area are illustrated in Figure IV.8-2 (Chapter IV.8, Cultural Resources).

IV.9.3.1.3 Impacts to Existing BLM Land Use Plans

Under the No Action Alternative, the existing land management plans within the LUPA Decision Area (California Desert Conservation Area [CDCA] Plan, as amended; Caliente Resource Management Plan [RMP], and Bishop RMP) would continue to allow for renewable energy and transmission development within acceptable land designations, including Solar Energy Zones and Solar Variance Lands. Each of these projects would require LUPAs prior to BLM approval if they are sited outside the Solar Energy Zones and Solar Variance Lands.

Table R2.9-2 presents the NAE acres with the available development areas on BLM lands under the No Action Alternative. Of the 3,584,875 NAE acres, 17,742 acres would be impacted by future projects. The majority of the NAE acres would be in wind energy.

Table R2.9-3 presents the NAE acres within existing ACECs and SRMAs. There are 1,756 NAE acres within existing SRMAs and 515,272 NAE acres within existing ACECs. Renewable energy development within existing ACECs, wildlife allocations, and SRMAs would continue to be reviewed on a project-by-project basis.

Table R2.8-4 presents the estimated number of archaeological and built-environment resources within existing ACECs and SRMAs. The model shows 51,332 resources within existing SRMAs and 75,701 resources within existing ACECs. Existing ACECs and wildlife allocations would continue to protect all types of cultural resources because of their disturbance limitations.

IV.9.3.1.4 Impacts of Transmission Outside the DRECP Area

The application of mitigation measures developed under NHPA Section 106 avoid, reduce, or mitigate the potential for adverse impacts of transmission line development on resources of interest to tribes. Section 106 consultations between BLM, the State Historic Preservation Officer, appropriate tribes, and other consulting parties would be required. Ongoing tribal consultation, in accordance with NHPA and other relevant federal legislation, would help determine areas of sensitivity, appropriate survey and mitigation needs, and other issues of concern such as access rights or disruption of cultural practices.

Impact TL-1: Disproportionately effect on resources of cultural and spiritual importance to tribes.

Resources of concern to tribes relate to both process and the physical world, as outlined in Volume III, Section III.9.3. Damage to or alteration of resources of interest to tribes could result from all phases of transmission line development outside the LUPA Decision Area. Resources identified as those related to the physical world could be impacted by the alteration, movement, or destruction of traditionally important cultural resources, including both direct and indirect effects. Natural resources with important cultural values for tribes could be disturbed, removed, displaced, or destroyed. Resources identified as those related to process could be affected by a lack of meaningful consultation, which could result from inadequate information exchange between parties, not consulting with the appropriate group or groups, not allotting enough time for adequate consultation, and holding consultation meetings in locations that make it difficult for all parties to attend.

Impact TL-2: Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations.

The development of renewable energy projects could impose burdens on tribal governments and other organizations related to their participation in the NEPA process or in NHPA Section 106 consultation.

IV.9.3.2 Preferred Alternative

IV.9.3.2.1 Impacts of Renewable Energy and Transmission

Renewable energy development activities covered by the Proposed LUPA would be concentrated in DFAs on BLM-managed lands. The Preferred Alternative could directly impact culturally important resources on 3,480 acres of lands classified as NAEs and an estimated 6,587 archaeological and built-environment resources (see Tables R2.9-5 and R2.8-5). This represents approximately 1.1% of the estimated 580,491 archaeological and built-environment resources within BLM-managed lands in the DRECP area under the Preferred Alternative. Figure IV.8-3 (in Chapter IV.8, Cultural Resources) illustrates the estimated number of cultural resources within Preferred Alternative DFAs, by DRECP ecoregion subarea. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Figure IV.9-2, Native American Element (Identified in the 1980 CDCA Plan), Preferred Alternative, illustrates the location of NAEs and the components of the Preferred Alternative.

While NAE-designated lands and cultural resource sites are important, the metrics listed above do not represent a complete list of places or areas important to tribes in the LUPA Decision Area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are identified and appropriate mitigation is developed.

Impact TL-1: Disproportionate effect on resources of cultural and spiritual importance to tribes.

As described in more detail in Section IV.9.2, all phases of renewable energy development under all of the alternatives could affect resources of cultural and spiritual importance to tribes.

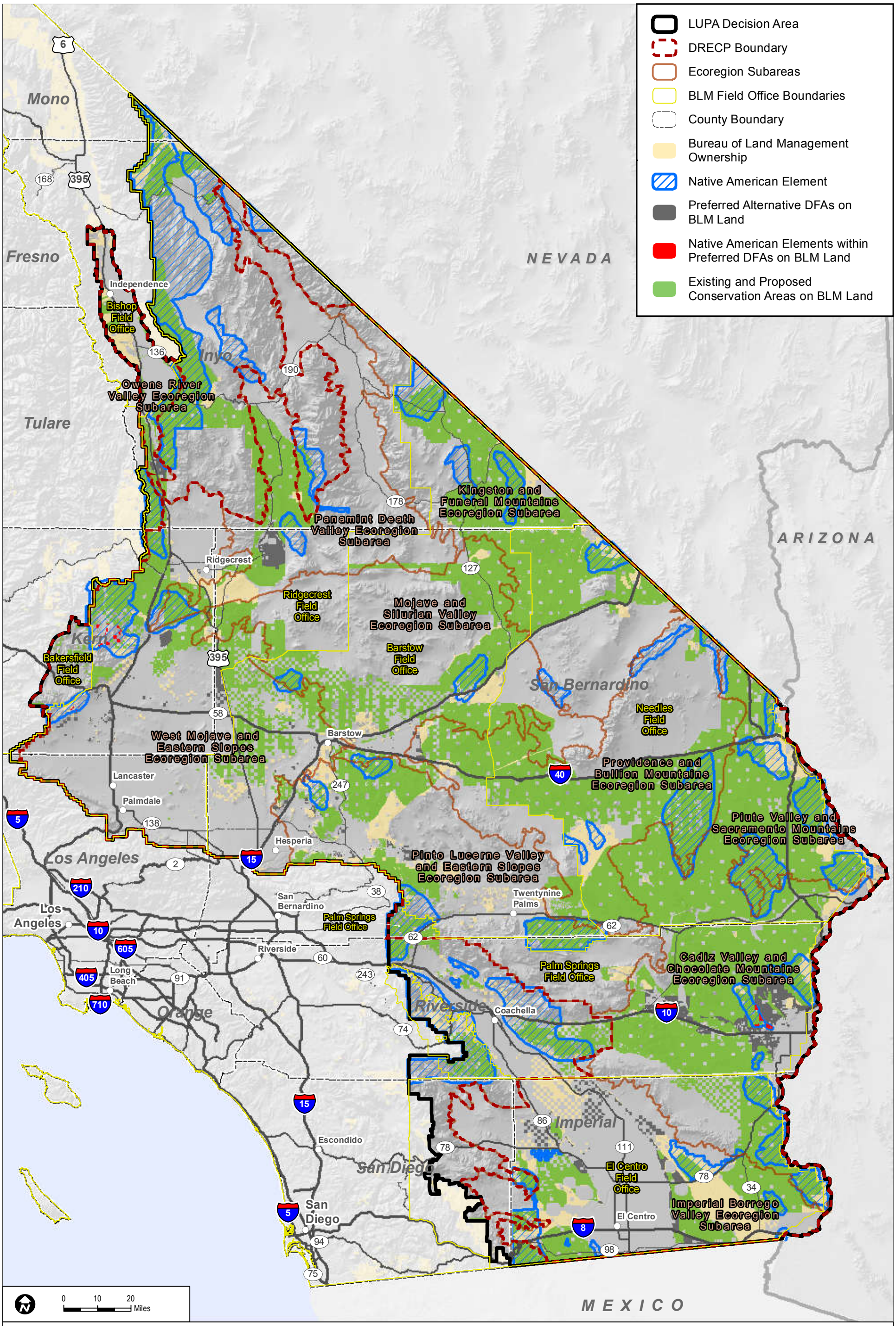
Impact TL-2: Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations.

The processes required to develop renewable energy projects can disproportionately affect tribal governments and organizations due the cost of participation.

Impacts in Variance Process Lands

Variance Process Lands represent the Solar PEIS variance lands as screened for the Proposed LUPA and this EIS based on BLM screening criteria. Development of renewable energy on Variance Process Lands would follow the process described in Section B.5 of Appendix B of the Solar PEIS Record of Decision (ROD). The process includes public outreach, interagency coordination, and consideration of environmental factors prior to the NEPA process. These lands would be subject to the DRECP LUPA Programmatic Agreement (PA) variance lands would not require a BLM LUPA so the environmental review process would be somewhat simpler than if the location were left undesignated (for further information refer to Section II.3.1, Overview of the Preferred Alternative).

Under the Preferred Alternative, there would be 40,118 acres of Variance Process Lands (Table IV.1-2, Appendix R2.2-6). An estimated 1,025 archaeological and built-environment resources are present. These overlap with 13,245 NAE acres. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-2

Native American Element (Identified in the 1980 CDCAP), Preferred Alternative

DRECP Proposed LUPA and Final EIS

October 2015

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-2.mxd 9/21/2015

INTENTIONALLY LEFT BLANK

Impact Reduction Strategies

The implementation of the Proposed LUPA under the Preferred Alternative would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Proposed LUPA would be lessened in several ways. The Proposed LUPA incorporates CMAs, as well as specific biological conservation designations and LUPA components. In addition, the implementation of a Programmatic Agreement (PA) between BLM, the Advisory Council for Historic Preservation (ACHP), and the California State Historic Preservation Officer (SHPO) and all existing laws, orders, regulations, and standards would reduce the impacts of project development. The most recent version of the PA is available online at www.drecp.org.

Despite the fact that land would be conserved under the Preferred Alternative, and some of these conserved lands would contain known NAE areas and cultural resources, there would still be damage, destruction, or alteration to unknown NAE areas and cultural resources. Because the traditional tribal world-view typically values cultural and spiritual resources as a whole, the conservation of some NAE areas and cultural resources would not alleviate the damage, destruction, or alteration of others in DFAs.

Design Features of the Solar PEIS

The design features of the Solar PEIS for resources of interest to tribes would be the same under all alternatives. These design features are as described for the No Action Alternative in Section IV.9.3.1.1. The DRECP LUPA would replace the Solar PEIS for renewable energy projects within the LUPA Decision Area. The most recent version is available online at www.drecp.org.

Conservation and Management Actions

The conservation strategy for the Preferred Alternative (presented in Volume II, Section II.3.4) defines specific actions that would reduce the impacts of the Preferred Alternative related to tribal resource values.

While CMAs would help reduce impacts to resources of concern to tribes, these measures would be most effective when developed during consultation and meaningful engagement with tribal communities. As described in Chapter III.9, this consultation regarding the DRECP has been under way for some time and would continue throughout the California Environmental Quality Act (CEQA)/NEPA process.

CMAs were designed specifically for both tribal concerns and cultural resources and vary by alternative. However, some cultural resources CMAs would conserve resources of interest to tribes, and are therefore relevant here.

Following are CMAs developed specifically for BLM lands that could reduce impacts to resources of Native American concern (Section III.9.2). Unless otherwise noted, all the CMAs for the Preferred Alternative also apply to Alternatives 1 through 4.

LUPA-Wide

LUPA-wide CMAs are considered to be "umbrella actions" or standard practices for ensuring appropriate biological conservation and management through implementation of avoidance and minimization for activities, as described previously. These LUPA CMAs would be required for all Covered Activities, as specified in individual CMAs, throughout the entire LUPA Decision Plan Area. As such, the LUPA CMAs would provide a consistent level of biological management and conservation throughout the LUPA Decision Area.

LUPA-wide CMAs for tribal concerns are the same as those for cultural resources: LUPA-CUL-1 through LUPA-CUL-11. Please see Section IV.8.3.2.1 for details.

Other LUPA-Wide CMAs

Other LUPA-wide CMAs relevant to tribal concerns are the same as those for cultural resources. These include: LUPA-BIO-8 through LUPA-BIO-11 and LUPA-BIO-15; LUPA-AIR-2, LUPA-AIR-4, and LUPA-AIR-5; LUPA-CTTM-1 through LUPA-CTTM-7; and LUPA-VRM-1.

Ecological and Cultural Conservation

No specific cultural resources or tribal interest CMAs were established for Ecological and Cultural Conservation. However, Biological Resources CMAs provide protections for dune environments, plant species, and wildlife species that likely will provide some protection for resources of concern to tribes.

NLCS

Although Public Law 111-11 provides for lands within the CDCA to become components of the National Conservation Lands, it does not include or define a process for developing specific management direction to conserve, protect, and restore resource values on the identified conservation lands. In addition to the identifications of National Conservation Lands, each alternative of the Proposed LUPA provides management direction to meet the objectives of Public Law 111-11. This management direction has been developed at two levels: planning area-wide and site or zone specific. The CMAs in this section apply to all

National Conservation Lands identified under P.L. 111-11 in the CDCA. Site-specific management is outlined in the Special Unit Management Plans in Appendix L.

All LUPA-wide and Ecological and Cultural Conservation Area CMAs also apply to the National Conservation Lands. NLCS CMAs relevant to tribal concerns are the same as those for cultural resources. Please see Section IV.8.3.2.1 for details.

Other NLCS CMAs

National Scenic and Historic Trails

National Historic Trails are considered to be cultural resources since they are unique in their scope, legal status, and management. CMAs have been developed specifically dealing with National Scenic and Historic Trails, and any cultural or tribal resources that may be present within the National Trail Management Corridor. NSHT CMAs relevant to tribal concerns are the same as those for cultural resources. These include NLCS-NSHT-1 through NLCS-NSHT-14. Please see Section IV.8.3.2.1 for details.

Disturbance Caps

NLCS disturbance cap CMAs relevant to tribal concerns are the same as those for cultural resources. This includes NLCS-DIST-9. Please see Section IV.8.3.2.1 for details.

ACECs

The CMAs in this section apply to all ACECs within the LUPA Decision Area. All LUPA-wide and Ecological and Cultural Conservation Area CMAs also apply to ACECs. Required elements of the ACECs and maps of each unit are included in the Special Unit Management Plans in Appendix L. ACEC CMAs relevant to tribal concerns are the same as those for cultural resources. This includes ACEC-CUL-1 through ACEC-CUL-6. Please see Section IV.8.3.2.1 for details.

Wildlife Allocations

Although there are no specific cultural resource or tribal interest CMAs for the wildlife allocations, the Lands and Realty CMAs developed for these allocations would provide some measure of protection for cultural and tribal resources by restricting renewable energy activities and development within these areas. Additionally, by protecting wildlife and plant habitat, it protects resources that are important to tribes.

SRMAs

No specific cultural resources or tribal interest CMAs were established for SRMAs. However, Comprehensive Trails and Travel Management and Lands and Realty CMAs limit renewable energy activities within SRMAs, likely providing some protection for cultural and tribal resources.

DFAs and Variance Process Lands

These CMAs are to be implemented in the DFAs, Variance Process Lands, or both, depending on the prefixes used, in addition to the LUPA-wide CMAs. Many of the CMAs are intended to facilitate the update of BLM's cultural resources geodatabase, and require its use when the updates are complete. DFA and Variance Process Lands CMAs relevant to tribal concerns are the same as those for cultural resources. This includes DFA-VPL-CUL-1 through DFA-VPL-CUL-8. Please see Section IV.8.3.2.1 for details.

Undesignated

The cultural resources and tribal interests CMAs for Undesignated lands are the same as the ones for the DFAs and Variance Process Lands listed above.

Transmission

The cultural resources and tribal interests CMAs for transmission projects are the same as the ones for the DFAs and Variance Process Lands listed previously.

IV.9.3.2.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

Under the Preferred Alternative, tribal resources would likely benefit from increased protection of natural resources within conservation areas as well as from the CMAs defined in Section IV.9.2.3.1.1. Proposed ACEC and NLCS designations could provide protection for tribal resources: Disturbance caps in these areas are designed to conserve and protect the resource values, and renewable energy development would be limited in these designations. Development in NLCS lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACECs and wildlife allocations, whichever is more restrictive. These disturbance caps and other management actions would minimize surface disturbance and thereby provide protection for cultural resources.

Under the Preferred Alternative, the NAE acres that would fall within conservation designations are shown in Table R2.9-5 (Appendix R2). With the Preferred Alternative, 58% of NAE acres (1,274,665) would fall within conservation designations and would not

be subject to renewable energy development. While important, CDCA-designated NAE areas do not represent a complete list of places or areas important to tribes. Unidentified resources important to tribes may be present.

Under the Preferred Alternative, an estimated 224,673 (or 62% of all known archaeological and built-environment resources) resources would fall within conservation designations (see Table R2.8-7 in Appendix R2). The majority of the estimated archaeological and built-environment resources (179,656) occur within the NLCS lands. As illustrated in Figure IV.8-4 (in Chapter IV.8, Cultural Resources), in the Preferred Alternative, the National Trail Management Corridor is 2 miles on either side of the trail's centerline. As a result, an estimated 28,355 cultural resources would be protected. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Due to their location within the conservation lands, resources in these areas would not be subject to impacts from renewable energy development.

IV.9.3.2.3 Impacts of Transmission Outside the DRECP Area

The impacts of transmission outside the DRECP area on tribal interests would be the same under all alternatives. These impacts are as described for the No Action Alternative in Section IV.9.3.1.3, Impacts of Transmission Outside the DRECP area in No Action Alternative.

IV.9.3.2.4 Comparison of the Preferred Alternative with No Action Alternative

Alternatives are compared by the number of NAE acres within each, the estimated cultural resources that would be conserved in the LUPA Decision Area, and the resources in BLM land designations that are also in DFAs and therefore might be impacted by development. While the number of resources conserved vary by each type of BLM land designation, cultural resources CMAs apply to NLCS, ACECs, and Trail Management Corridors and so the importance of those designations are emphasized here. Table IV.9-1 compares the acres of NAE within DFAs and the conservation designations for the Preferred Alternative and the No Action Alternative.

Table IV.9-1
Comparison of Preferred Alternative with the No Action Alternative –NAE

	Preferred Alternative	No Action
NAE acres within DFA	3,480	17,742
NAE acres within the Conservation Designation	1,274,665	1,310,098

The Preferred Alternative would impact a fewer number of NAE acres within the DFA footprints than the No Action Alternative. However, more resources would be conserved in conservation designations under the No Action Alternative.

Table IV.9-2 compares the Preferred Alternative with the No Action Alternative. The Preferred Alternative would affect slightly more cultural resources in the DFA footprints than the No Action Alternative. While the No Action Alternative has more acres of DFA, the Preferred Alternative includes more acres in the Owens River Valley that are very sensitive for cultural resources. However, significantly more resources would be conserved in conservation designations and in NHT Management Corridors.

Table IV.9-2
Comparison of Preferred Alternative with the No Action Alternative –Cultural Resources

	Preferred Alternative	No Action
Number of resources in DFAs	6,587	4,077
Number of resources in SRMA	59,773	51,332
Number of resources in ERMA	179,656	N/A
Number of resources in NLCS	126,755	75,701
Number of resources in ACEC	733	N/A
Number of resources in Wildlife Allocation	17,762	N/A
Number of resources in LWCs	28,355	N/A
Number of resources in NHT Management Corridors	3,185	4,077
NHT corridor width	2 miles on either side of centerline	None
Total number of resources conserved in Conservation Designations or BLM protected lands	224,673	62,487

Overall, the Preferred Alternative is more protective to NAE lands and cultural resources than the No Action Alternative.

Geographic Distinctions

In this comparison, alternatives are described with regard to the presence or absence of NAE acres in the geographic areas of interest and potential impacts there, and the potential impacts to archaeological and built-environment resources in the same locations.

Under the Preferred Alternative, the Silurian Valley would be a conservation designation. Under the No Action Alternative, this location would be undesignated, and therefore could be either conserved or developed. No NAE acres have been identified in this location

(Figure III.9-1); but that does not mean that no resources important to tribes are present. Therefore, the Preferred Alternative would protect more resources of interest to tribes in this location than under the No Action Alternative.

Under the Preferred Alternative and the No Action Alternative, the Hidden Hills area in Inyo County near the Nevada state line would be undesignated. Based on previous studies associated with proposed solar projects in this location, the Hidden Hills area is known to be very culturally sensitive because of the presence of a segment of the Salt Song Trail, Route 66, and an NSHT. In addition, there are NAE acres in this location (Figure III.9-1). Overall, this location might either be conserved or developed, therefore there is no difference between the alternatives for resources of interest to tribes.

Under the Preferred Alternative, the Notch in the Park (south of Ivanpah near Mountain Pass) would be Variance Process Lands. Under the No Action Alternative, this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources of interest to tribes.

Under the Preferred Alternative, the area north of Tehachapi would be an FAA. Under the No Action Alternative, this location would be undesignated. The majority of this area consists of NAE acres (Figure III.9-1). Overall, for each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources of interest to tribes.

Under the Preferred Alternative, the area east of Twentynine Palms would be an FAA. Under the No Action Alternative, this location would be undesignated. There are NAE acres in this location (Figure III.9-1). Overall, for each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources of interest to tribes.

Under the Preferred Alternative, the Owens Lake would be a conservation designation. Under the No Action Alternative, this location would be undesignated. There are NAE acres in this location (Figure III.9-1), and dry lakes in this part of California are known to be very culturally sensitive. In addition, the Owens River Valley ecoregion subarea has the highest density of cultural resources of all of the DRECP ecoregion subareas (1.76 resources per acre). Therefore, the Preferred Alternative would protect more resources of interest to tribes in this location than the No Action Alternative.

Under the Preferred Alternative, Searles Lake between Fort Irwin and China Lake would be a DFA. Under the No Action Alternative, this location would be undesignated. There are NAE acres in this location (Figure III.9-1). Overall, for each alternative this location could

either be developed or conserved, therefore there is no difference between the alternatives for resources of interest to tribes.

Under the Preferred Alternative the area along U.S. Route 395, north of Edwards Air Force Base would be a DFA. Under the No Action Alternative, this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In the Preferred Alternative this location would be open for development while in the No Action Alternative this location could either be developed or conserved. Therefore the No Action Alternative would protect more resources of interest to tribes in this location than the Preferred Alternative.

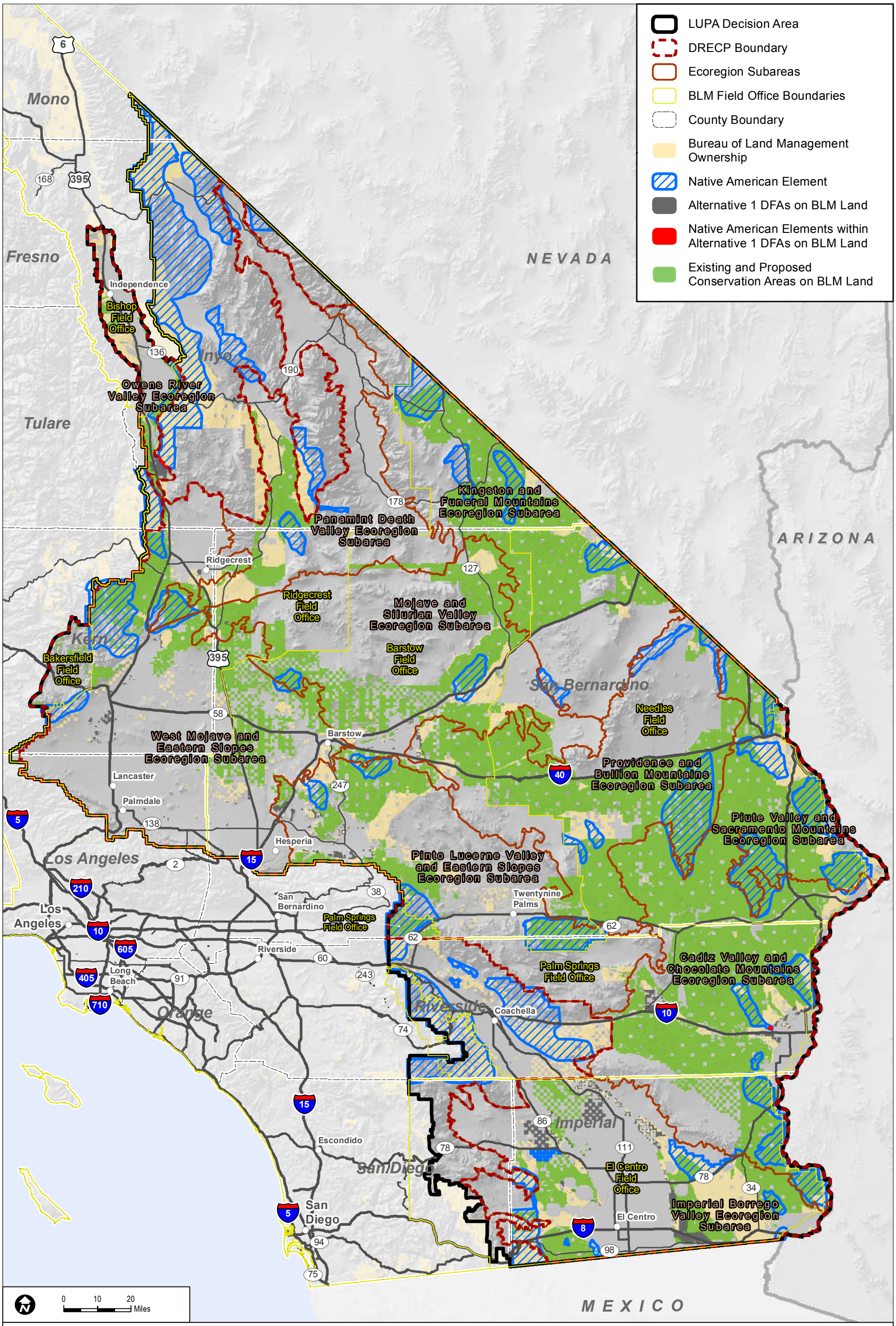
IV.9.3.3 Alternative 1

IV.9.3.3.1 Impacts of Renewable Energy and Transmission

The general issues of concern to tribes related to renewable energy development for Alternative 1 are the same as those described for typical impacts (Section IV.9.2.1) and for the No Action Alternative (Section IV.9.3.1.1). Alternative 1 could directly impact culturally important resources on 793 acres of lands classified as NAEs. Figure IV.9-3, Native American Element (Identified in the 1980 CDCA Plan), Alternative 1, illustrates the location of NAEs and the components of Alternative 1. Alternative 1 could also impact an estimated 9,501 cultural resource sites (see Table R2.9-7 and Table R2.8-9 in Appendix R2). Figure IV.8-5 (Chapter IV.8, Cultural Resources) illustrates the estimated number of cultural resources within Alternative 1 DFAs by DRECP ecoregion subarea.

While NAE designated lands and cultural resource sites are important, the metrics listed above do not represent a complete list of places or areas important to tribes in the DRECP area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are taken into account.

In addition, under Alternative 1, an estimated 9,501 archaeological and built-environment resources would fall within DFAs (see Table R2.8-9 in Appendix R2). Overall, approximately 1.6% of estimated archaeological and built-environment resources within the LUPA lands in the DRECP area would occur within DFAs under Alternative 1. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-3

Native American Element (Identified in the 1980 CDCAP), Alternative 1

DRECP Proposed LUPA and Final EIS

October 2015

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-3.mxd 9/18/2015

INTENTIONALLY LEFT BLANK

Impact TL-1: Disproportionate effect on resources of cultural and spiritual importance to tribes.

As described in more detail in Section IV.9.2, all phases of renewable energy development under all of the alternatives could impact resources of cultural and spiritual importance to tribes.

Impact TL-2: Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations.

As described in more detail in Section IV.9.2, the development of renewable energy projects could disproportionately impact tribal governments and organizations.

While NAE designated lands and cultural resource sites are important, the metrics listed above do not represent a complete list of places or areas important to tribes in the DRECP area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are taken into account.

Impacts on Variance Process Lands

Variance Process Lands refer to areas that would be open for solar, wind, and geothermal energy applications under the Proposed LUPA but need to follow a variance process before the BLM would determine whether to continue with processing them. These lands would be subject to the DRECP LUPA PA. Development in any of the Variance Process Lands could adversely impact resources important to tribes.

Under Alternative 1 there would be 34,965 acres of Variance Process Lands which overlap with 4,301 NAE acres (Table IV.1-2). An estimated 4,908 archaeological and built-environment resources are present. TCPs and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a qualitative manner in this document.

Impact Reduction Strategies

The implementation of the Proposed LUPA would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Proposed LUPA would be lessened in several ways. First, the Proposed LUPA incorporates CMAs for each alternative. Also, the implementation of a PA with the ACHP and the California SHPO and existing laws, orders, regulations, and standards would

reduce the impacts of project development. The most recent version of the PA is available online at www.drecp.org.

Although land would be conserved under Alternative 1, and some of these conserved lands would contain known resources of interest to tribes, there would still be damage or alteration to as-yet unknown resources. Because the traditional tribal world-view typically values cultural and spiritual resources holistically, the conservation of some resources would not mitigate the damage or alteration of other resources in DFAs.

Design Features of the Solar PEIS

The design features of the Solar PEIS for cultural resources would be the same under all alternatives. These design features are as described for the No Action Alternative in Section IV.8.3.1.1. The DRECP LUPA PA would replace the Solar PA for renewable energy projects within the LUPA Decision Area. The most recent version of the PA is available online at www.drecp.org.

Conservation and Management Actions

The conservation strategy for Alternative 1 (presented in Volume II, Section II.4.4) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes a definition of the conservation designations and specific CMAs as defined for the Preferred Alternative. The CMAs would be the same under all alternatives, but with the following exceptions, which are relevant for both tribal concerns and cultural resources.

NLCS

Management of National Conservation Lands

1. **Planning Area–wide National Conservation Land Management Direction**

   Comprehensive Trails and Travel Management.

   - **Cultural Resources.** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800.

National Scenic and Historic Trails

Conservation and Management Actions for the Pacific Crest National Scenic Trail, and the Juan Bautista de Anza and Old Spanish National Historic Trails Management Corridors

- **Management Corridor Width (see also maps).** Establish a National Trail Management Corridor, width generally 0.25 mile from centerline.
- **Management of Trail Corridors.** Manage National Trails as components of the BLM's NLCS. Where National Trails overlap other National Conservation Lands, the more protective CMAs or land use allocations will apply. Within these areas, the BLM will support the nature and purposes of the designated National Trails.
- **Cultural Resources.** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.
- **Mitigation Requirements**
    - If a segment of an NSHT or trail under study for possible designation traverses a DFA, it will be subject to mitigation for impacts to trail resources, qualities, values, and associated settings, and primary use or uses, including, but not limited to, and not in priority order: avoidance, the cost of trail relocation, on-site mitigation, and off-site mitigation. Compensation can include acquisition or restoration of corridor features and landscapes at a minimum of 2:1, and must result in a net benefit to the overall National Trail Management Corridor. Covered Activity development within high potential route segments must not substantially interfere with the nature and purposes of the National Trail.

IV.9.3.3.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

Under Alternative 1, tribal resources might benefit from increased protection of natural resources within conservation areas as well as from the CMAs defined above. Proposed ACEC and NLCS designations could provide protection for tribal resources; disturbance caps in these areas are designed to conserve and protect the resource values. Development in NLCS lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACEC/wildlife allocations, whichever is more restrictive. These disturbance caps and other management actions would minimize surface disturbance and thereby provide protection for cultural resources of interest to tribes.

Under Alternative 1, the NAE acres within conservation designations are shown in Table R2.9-8 (Appendix R2). With Alternative 1, 70% of NAE acres (1,560,399) would fall within conservation designations and would not be subject to renewable energy development. While important, NAE areas do not represent a complete list of places or areas important to tribes. Unidentified resources important to tribes may be present.

Under Alternative 1, an estimated 284,375 (or 49%of all known archaeological and built-environment resources) resources would fall within conservation designations (see Table R2.8-11 in Appendix R2). The majority of the estimated archaeological and built-environment resources (175,374) occur within ACEC lands. As illustrated in Figure IV.8-6 (in Chapter IV.8, Cultural Resources), in Alternative 1 the National Trail Management Corridor is 0.25 mile on either side of the centerline. As a result, an estimated 2,015 cultural resources would be protected. The number of cultural resources preserved by technology type is shown in Table R2.8-9. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Due to their location, resources in these areas would not be subject to impacts from renewable energy development.

IV.9.3.3.3 Impacts of Transmission Outside the DRECP Area

The impacts of transmission outside the DRECP area on tribal interests would be the same under all alternatives. These impacts are as described for the No Action Alternative in Section iV.9.3.1.4.

IV.9.3.3.4 Comparison of Alternative 1 with Preferred Alternative

Table IV.9-3 compares the acres of NAE within DFAs and the conservation designations for the Preferred Alternative and Alternative 1. The Preferred Alternative would contain a greater number of NAE acres within the DFA footprints than Alternative 1. Additionally, more NAE acres would be conserved in conservation designations under Alternative 1. Thus, Alternative 1 is more protective of NAE acres than the Preferred Alternative.

Table IV.9-3
Comparison of Preferred Alternative with Alternative 1 – NAE Acres

	Preferred Alternative NAE Acres	Alternative 1 NAE Acres
Within DFAs	3,480	793
Within Conservation Designations	1,274,665	1,560,399

Table IV.9-4 compares the number of cultural resources within DFAs and the conservation designations for the Preferred Alternative and Alternative 1. The Preferred Alternative would affect fewer cultural resources in the DFA footprints as compared to Alternative 1. In contrast, Alternative 1 would conserve more resources in the conservation designations but conserve fewer resources in the NHT corridors because the Preferred Alternative the corridor is 2 miles off the centerline of the trail rather ¼ mile off centerline in Alternative 1.

Table IV.9-4
Comparison of Preferred Alternative with the Alternative 1 – Cultural Resources

	Preferred Alternative	Alternative 1
Number of Resources in DFAs	6,587	9,501
Number of Resources in SRMA	59,773	68,356
Number of Resources in NLCS	179,656	19,315
Number of Resources in ACECs	126,755	175,374
Number of Resources in Wildlife Allocation	733	19,315
Number of Resources in LWCs	17,762	0
Number of Resources in NHT Management Corridors	3,185	2,015
Total number of Resources Conserved in Conservation Designations	224,673	221,980

Overall Table IV.9-4 and Table IV.9-5 suggest that for Alternative 1 there are fewer acres of NAE land within a DFA footprint and more within conservation designations and the number of resources conserved is larger. However, the Preferred Alternative has the potential to affect fewer cultural resources in DFA footprints and conserves more cultural resources in conservation designation. As NAE acres are ranked higher in this analysis compared with cultural resources, Alternative 1 is more protective to resources of interest to tribes than the Preferred Alternative.

Geographic Distinctions

In this section, alternatives are compared in two ways: (a) by the presence or absence of NAE acres in the geographic areas of interest and potential impacts there and (b) by the potential impacts to archaeological and built-environment resources in these same locations.

Under both the Preferred Alternative and Alternative 1, the Silurian Valley would be a conservation designation. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, both alternatives would protect resources important to tribes in this location equally.

Under the Preferred Alternative, the Hidden Hills area of Inyo County would be undesignated. Under Alternative 1, this location would be Variance Process Land. Based on previous studies associated with a proposed solar project in this location, the Hidden Hills area is known to be very culturally sensitive because of the presence of a segment of the Salt Song Trail, Route 66, and a National Historic Trail. In addition, there are NAE acres in this location (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the Notch in the Park would be within Variance Process Lands. Under Alternative 1 this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the Area north of Tehachapi would be in Variance Process Lands. Under Alternative 1 this location would be undesignated. The majority of this area consists of NAE acres. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the area east of Twentynine Palms would be Variance Process Lands. Under Alternative 1, this location would be undesignated. There are NAE acres in this location (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under both the Preferred Alternative and Alternative 1, Owens Lake would be a conservation designation. There are NAE acres in this location (Figure III.9-1), and dry lakes in this part of California are known to be very culturally sensitive. In addition, the Owens River Valley ecoregion subarea has the highest density of cultural resources of all of the DRECP ecoregion subareas (1.76 resources per acre). Therefore, both alternatives would equally protect resources important to tribes in this location.

Under the Preferred Alternative, Searles Lake between Fort Irwin and China Lake would be a DFA. Under Alternative 1, this location would be undesignated. There are NAE acres in this location (Figure III.9-1). In each alternative, this location could either be developed or conserved, though development is more likely with the Preferred Alternative. Therefore Alternative 1 would be more protective to resources important to tribes.

Under the Preferred Alternative, the area along U.S. Route 395 north of Edwards Air Force Base is a DFA. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Under Alternative 1, this location would be a conservation designation. Therefore, Alternative 1 would protect more resources important to tribes in this location than under the Preferred Alternative.

IV.9.3.4 Alternative 2

IV.9.3.4.1 Impacts of Renewable Energy and Transmission

The general issues of concern to tribes related to renewable energy development for Alternative 2 are the same as those described in Section IV.9.2.1 for Typical Impacts and in Section IV.9.3.1.1 for the No Action Alternative. Alternative 2 could directly impact culturally important resources on 8,320 acres of lands classified as NAEs. Figure IV.9-4, Native American Element (as identified in the 1980 CDCA Plan), Alternative 2, illustrates the location of NAEs and the components of Alternative 2. This alternative could also impact an estimated 7,985 cultural resource sites (Appendix R2, Table R2.9-10 and Table R2.8-13). Figure IV.8-7 (Chapter IV.8, Cultural Resources) illustrates the estimated number of cultural resources within Alternative 2 DFAs by DRECP ecoregion subarea.

While NAE designated lands and cultural resource sites are important, the metrics listed here do not represent a complete list of places or areas important to tribes in the DRECP area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are taken into account.

Under Alternative 2, an estimated 7,985 archaeological and built-environment resources would fall within DFAs (see Table R2.8-13 in Appendix R2). Overall, approximately 1.4% of estimated archaeological and built-environment resources occur within DFAs under Alternative 2. Figure IV.8-7 (in Chapter IV.8, Cultural Resources) shows the density of these resources by ecoregion. The number of cultural resources impacted by technology type is shown in Table R2.8-13. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner. Each impact is described below.

Impacts TL-1 (Disproportionate effect resources of cultural and spiritual importance to tribes) and TL-2 (Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations)

As described in Section IV.9.2, all phases of renewable energy development under all of the alternatives could affect resources of cultural and spiritual importance to tribes and disproportionately impact tribal governments and organizations.

Impacts in Variance Process Lands

Variance Process Lands are areas that would be open for solar, wind, and geothermal energy development under the Proposed LUPA but need to follow a variance process before BLM would determine whether to continue with processing them. These lands would be subject to the DRECP LUPA. Development in any of the Variance Process Lands could adversely impact resources important to tribes and other communities.

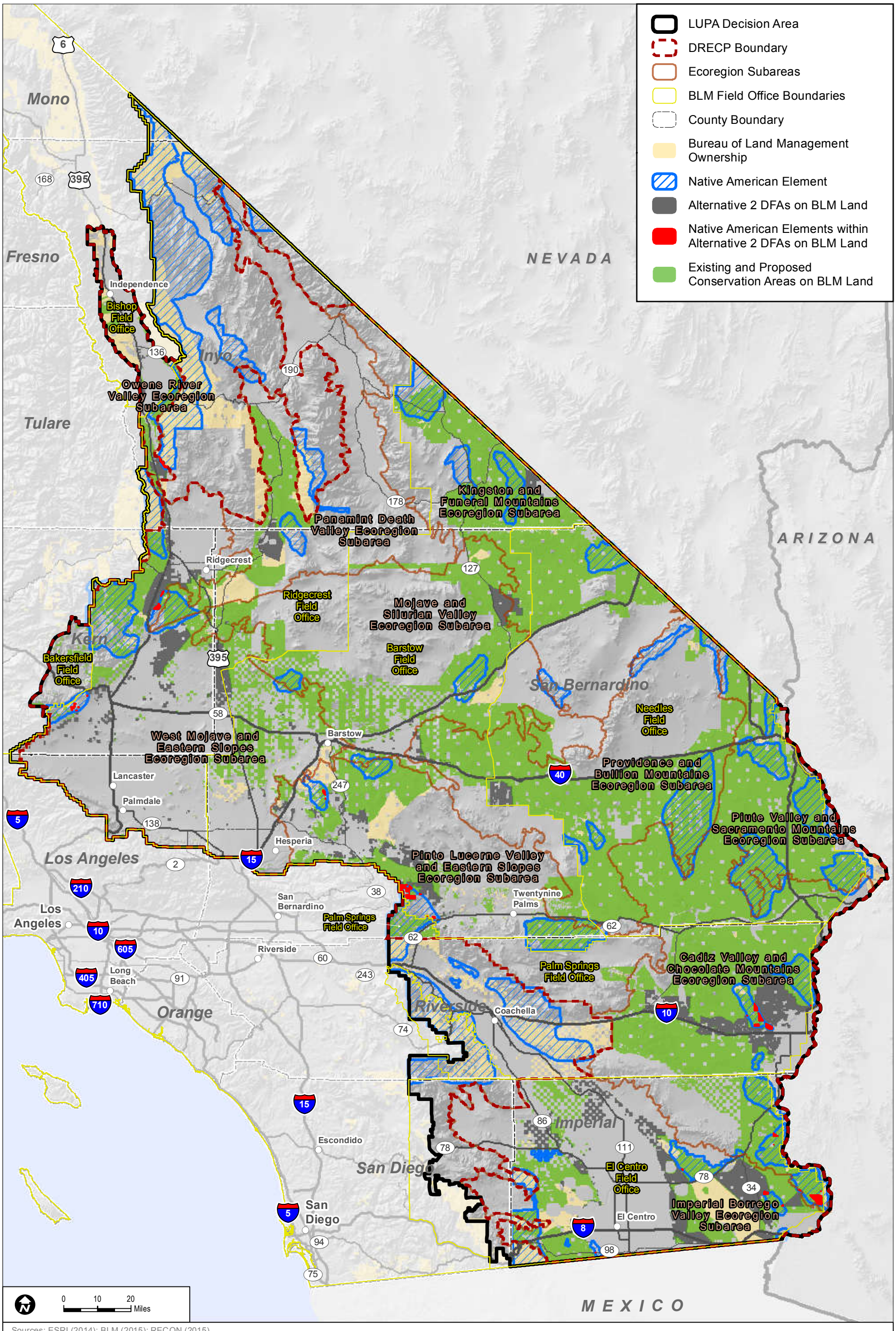
Under Alternative 2 there would be 15,986 acres of Variance Process Lands (Table IV.1-2, Appendix R2.8 Table R2.8-14). These overlap with 120 NAE acres. An estimated 183 archaeological and built-environment resources are present. Traditional cultural properties (TCPs)and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a qualitative manner in this document.

Impact Reduction Strategies

The implementation of the Proposed LUPA would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Proposed LUPA would be lessened in several ways. First, the Proposed LUPA incorporates CMAs for each alternative. Also, the implementation of a NHPA Section 106 with the ACHP and the California SHPO, together with existing laws, orders, regulations, and standards, would reduce the impacts of project development. The most recent version of the PA is available online at www.drecp.org.

Design Features of the Solar PEIS

The design features of the Solar PEIS for resources important to tribes would be the same under all alternatives. These design features are as described for the No Action Alternative in Section IV.9.3.1.1. The DRECP LUPA would replace the Solar PA for renewable energy projects within the LUPA Decision Area. The most recent version of the PA is available online at www.drecp.org.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-4

Native American Element (Identified in the 1980 CDCAP), Alternative 2

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-4.mxd 9/18/2015

INTENTIONALLY LEFT BLANK

Conservation and Management Actions

The conservation strategy for Alternative 2 (presented in Volume II, Section II.5.4) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes specific CMAs, as defined for the Preferred Alternative. The CMAs would be the same under all alternatives with the following exceptions for both tribal concerns and cultural resources.

NLCS

Management of National Conservation Lands

1. **Planning Area–wide National Conservation Land Management Direction**
    - **Cultural Resources.** No allowable uses that result in adverse effects to historic properties as defined under Section 106 of the National Historic Preservation Act and the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800 will be authorized.

Conservation and Management Actions for Pacific Crest National Scenic Trail, and Juan Bautista de Anza and Old Spanish National Historic Trails Management Corridors

- **Management Corridor Width.** Establish a National Trail Management Corridor, width generally 10 miles from centerline.
- **Management of Trail Corridors.** Manage National Trails as components of the BLM's NLCS. Where National Trails overlap other National Conservation Lands, the more protective CMAs or land use allocations will apply. Within these areas, the BLM will support the nature and purposes of the designated National Trails.
- **Cultural Resources.** No allowable uses that result in adverse effects to historic properties as defined under Section 106 of National Historic Preservation Act and the implementing regulations at 36 CFR Part 800 will be authorized.
- **Mitigation Requirements.** If a segment of a National Scenic or Historic Trail or trail under study for possible designation traverses a DFA, it will be subject to mitigation for impacts to trail resources, qualities, values, and associated settings, and the primary use or uses, including, but not limited to, and not in priority order: avoidance, the cost of trail relocation, on-site mitigation, and off-site mitigation. Compensation can include acquisition or restoration of corridor features and landscapes will be at a minimum of 2:1, and must result in a net benefit to the overall national trail management corridor. Development of Covered Activities in high potential route segments must not substantially interfere with the nature and purposes of the National Trail.

IV.9.3.4.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

Under Alternative 2, tribal resources might benefit from increased protection of natural resources within conservation areas as well as from the CMAs defined previously. Proposed ACEC and NLCS designations could provide protection for tribal resources; disturbance caps in these areas are designed to conserve and protect the resource values, and renewable energy development would be limited in these designations. Development in NLCS lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACECs and wildlife allocations, whichever is more restrictive. These disturbance caps and other management actions would minimize surface disturbance and thereby provide protection for cultural resources of interest to tribes.

Under Alternative 2, the NAE acres within conservation designations are shown in Table R2.9-11 (Appendix R2). With Alternative 2, an estimated 76% of NAE acres (1,686,182) are within the conservation designations and would not be subject to renewable energy development. While important, NAE areas do not represent a complete list of places or areas important to tribes. Unidentified resources important to tribes may be present.

In addition, an estimated 583,352 (39% of all known archaeological and built-environment resources) resources fall within conservation designations (see Table R2.8-13 in Appendix R2). The majority of the estimated archaeological and built-environment resources (224,810) occur within NLCS lands, with 40,802 on existing and proposed ACEC lands. In Alternative 2, the National Trail Management Corridor is 10 miles on either side of the centerline, as illustrated in Figure IV.8-8 (Chapter IV.8, Cultural Resources). As a result, an estimated 214,051 cultural resources would be protected. The number of cultural resources preserved by technology type is shown in Table R2.8-13. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Due to their location within the conservation designation system, resources in these areas would not be subject to intensive impacts from renewable energy development.

IV.9.3.4.3 Impacts of Transmission Outside the LUPA Decision Area

The impacts of transmission outside the LUPA Decision Area on tribal interests would be the same under all alternatives. These impacts are as described for the No Action Alternative in Section IV.9.3.1.4.

IV.9.3.4.4 Comparison of Alternative 2 with Preferred Alternative

In this section, alternatives vary in two ways: by the presence or absence of NAE acres in the geographic areas of interest and potential impacts there, and by potential impacts to archaeological and built-environment resources in the same locations.

Table IV.9-5 compares acres of NAE within the DFA and the conservation designations for the Preferred Alternative and Alternative 2. The Preferred Alternative would contain fewer NAE acres within the DFA footprints than Alternative 2. However, more NAE acres would be protected in conservation designations under Alternative 2. The difference is such that Alternative 2 is more protective of NAE acres than the Preferred Alternative.

Table IV.9-5
Comparison of Preferred Alternative with Alternative 2 – NAE Acres

Land Classification	Preferred Alternative NAE Acres	Alternative 2 NAE Acres
DFA	3,480	8,320
Conserved in Conservation Designations	1,274,665	1,686,182

Table IV.9-6 compares the Preferred Alternative and Alternative 2. The Preferred Alternative would have the potential to affect fewer cultural resources in the DFA footprints than Alternative 2. However, Alternative 2 would conserve more resources in the conservation designations and significantly more resources in the NHT Management Corridors due to an expanded corridor width. While the Preferred Alternative contains fewer acres of NAE land within DFA footprints, Alternative 2 conserves more within conservation designations.

Table IV.9-6
Comparison of Preferred Alternative with Alternative 2 – Cultural Resources

	Preferred Alternative	Alternative 2
Number of Resources in DFAs	6,587	7,985
Number of Resources in Variance Process Lands	1,025	183
Number of Resources in SRMA	59,773	65,075
Number of Resources in NLCS	179,656	224,810
Number of Resources in ACECs	126,755	40,802
Number of Resources in Wildlife Allocation	733	2
Number of Resources in LWCs	17,762	20,082
Number of Resources in Trail Management Corridors	3,185	214,051

Table IV.9-6
Comparison of Preferred Alternative with Alternative 2 – Cultural Resources

	Preferred Alternative	Alternative 2
Total number of Resources Conserved in Conservation Designations	224,673	227,005
NHT Corridor Width	2 miles on either side of centerline	10 miles on either side of centerline

Overall, Alternative 2 is more protective of NAE acres and resources of interest to tribes than the Preferred Alternative and is the most protective of all of the alternatives.

Geographic Distinctions

Under the Preferred Alternative, the Silurian Valley would be conservation designation. Under Alternative 2, this location would be a DFA. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Overall, the Preferred Alternative could protect more resources important to tribes than Alternative 2.

Under the Preferred Alternative the Hidden Hills area of Inyo County would be a DFA. Under Alternative 2 this location would be a DFA. Based on previous studies associated with a proposed solar project in this location, the Hidden Hills area is known to be very culturally sensitive because of the presence of a segment of the Salt Song Trail, Route 66, and an NSHT. In addition, there are NAE acres in this location (Figure III.9-1). Therefore, the Preferred Alternative would be more likely to conserve resources important to tribes in this location than would Alternative 2.

Under the Preferred Alternative, the Notch in the Park would be Variance Process Lands. Under Alternative 2 this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the area north of Tehachapi would be Variance Process Lands. Under Alternative 2 this location would be undesignated. The majority of this location consists of NAE acres (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the area east of Twentynine Palms would be Variance Process Lands. Under Alternative 2, this location would be a conservation designation. There are NAE acres in this location (Figure III.9-1). Therefore, Alternative 2 would be more likely to conserve resources important to tribes in this location than under the Preferred Alternative.

Under both the Preferred Alternative and Alternative 2, Owens Lake would be a conservation designation. There are NAE acres in this location (Figure III.9-1), and dry lakes in this part of California are known to be very culturally sensitive. In addition, the Owens River Valley ecoregion subarea has the highest density of cultural resources of all the DRECP ecoregion subareas (1.76 resources per acre). Therefore, both alternatives would equally protect resources important to tribes in this location.

Under both the Preferred Alternative and Alternative 2, Searles Lake between Fort Irwin and China Lake would be a DFA. There are NAE acres in this location (Figure III.9-1). Therefore, both alternatives could have similar potential negative impacts to resources important to tribes in this location.

Under both the Preferred Alternative and Alternative 2, the area along U.S. Route 395 north of Edwards Air Force Base would be a DFA. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, both alternatives could have similar potential negative impacts to resources important to tribes in this location.

IV.9.3.5 Alternative 3

IV.9.3.5.1 Impacts of Renewable Energy and Transmission

The general issues of concern to tribes related to renewable energy development for Alternative 3 are the same as those described in Section IV.9.2.1 for Typical Impacts and in Section IV.9.3.1.1 for the No Action Alternative. Alternative 3 could directly impact resources important to tribes on 727 acres of lands classified as NAEs. Figure IV.9-5, Native American Element (Identified in the 1980 CDCA Plan), Alternative 3, illustrates the location of NAEs and the components of Alternative 3. Alternative 3 has the potential to affect an estimated 5,719 cultural resources (Appendix R2, Table R2.9-14, and Table R2.8-17). Figure IV.8-9, Chapter IV.8, Cultural Resources, illustrates the estimated number of cultural resources within Alternative 3 DFAs by DRECP ecoregion subarea.

Under Alternative 3, an estimated 5,719archaeological and built-environment resources are within DFA footprints on the BLM-managed lands, as shown in Table R2.8-17 (Appendix R2.8). Overall, approximately 1% of estimated archaeological and built-environment resources occur within DFAs in BLM-managed lands under Alternative 3. TCPs and cultural landscapes are not included in this calculation.

Under Alternative 3, cultural resources found within BLM land designations are shown in Table R2.8-20. The majority of the estimated archaeological and built-environment resources (170,759) occur within the NLCS lands. In Alternative 3, the National Trail Management Corridor is 5 miles on either side of the centerline. As a result, an estimated 18,055 cultural resources would be protected. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a qualitative manner in this document.

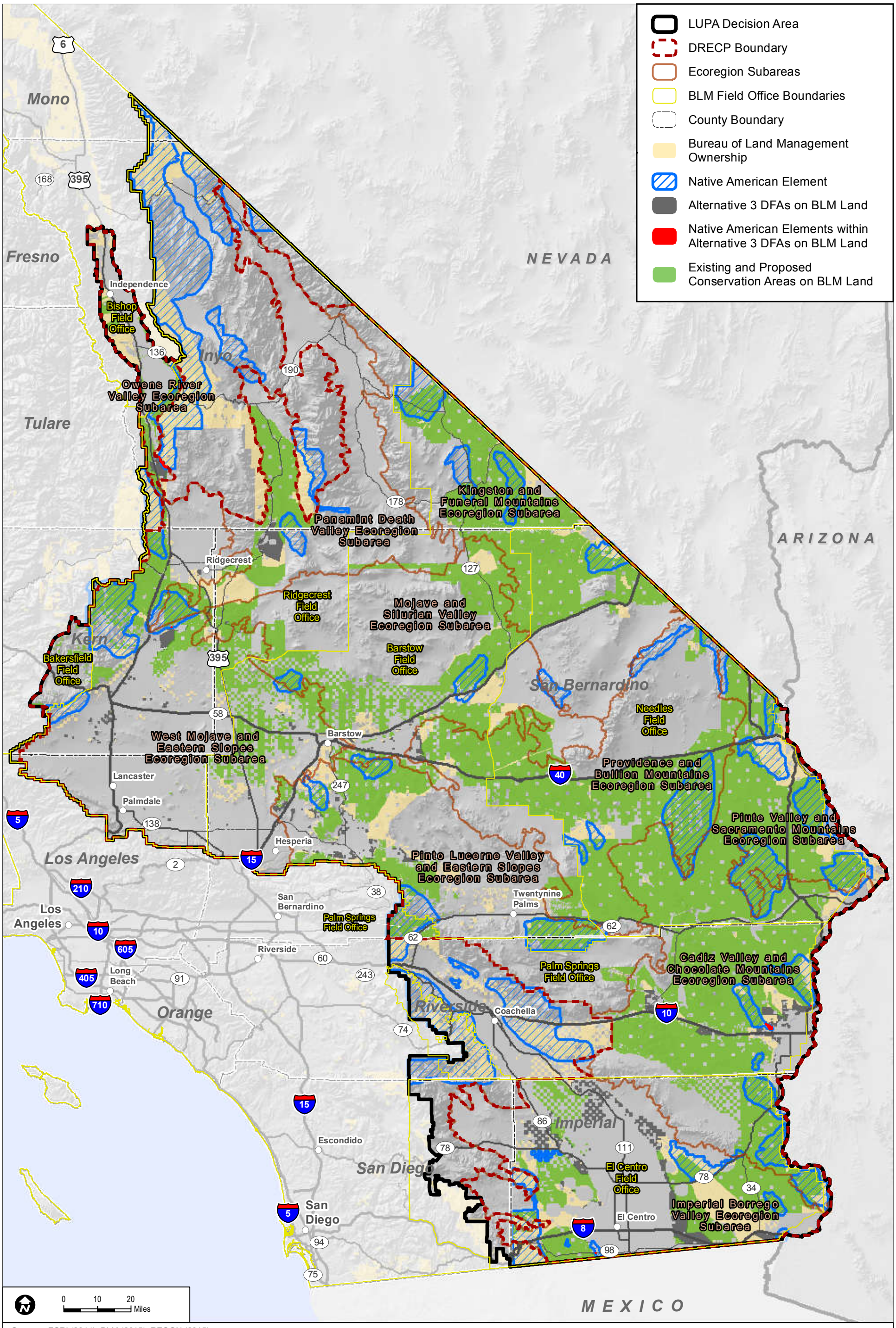
Impacts TL-1 (Disproportionate effect on resources of cultural and spiritual importance to tribes) and TL-2 (Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations)

As described in Section IV.9.2, all phases of renewable energy development under all of the alternatives could affect resources of cultural and spiritual importance to tribes and disproportionately impact tribal governments and organizations.

Impacts in Variance Process Lands

Variance Process Lands are areas that would be open for solar, wind, and geothermal energy applications under the Proposed LUPA, but that need to follow a variance process before the BLM would determine whether to continue with processing them. These lands would be subject to the DRECP LUPA. Development in any of the Variance Process Lands could adversely impact resources important to tribes and other communities.

Under Alternative 3, there would be 2,332 acres of Variance Process Lands (Table IV.1-2, Appendix R2.8 Table R2.8-18). These overlap with no NAE acres. An estimated 23 archaeological and built-environment resources are present. TCPs and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a qualitative manner in this document.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-5

Native American Element (Identified in the 1980 CDCAP), Alternative 3

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-5.mxd 9/18/2015

INTENTIONALLY LEFT BLANK

Impact Reduction Strategies

Implementation of the DRECP LUPA would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Proposed LUPA would be lessened in several ways. First, the Proposed LUPA incorporates CMAs for each alternative, including specific ones for cultural resource protection. Also, the implementation of a NHPA Section 106 PA with the ACHP and the California SHPO and existing laws, orders, regulations, and standards would reduce the impacts of project development. The most recent version of the PA is available online at www.drecp.org.

Design Features of the Solar PEIS

The design features of the Solar PEIS for cultural resources would be the same under all alternatives. These design features are as described for the No Action Alternative in Section IV.9.3.1.1. The DRECP LUPA PA would replace the Solar PA for renewable energy projects within the LUPA decision area. The most recent version of the PA is available online at www.drecp.org.

Conservation and Management Actions

The conservation strategy for Alternative 3 (presented in Volume II, Section II.6.4) defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes specific CMAs for the Preferred Alternative. The CMAs would be the same under all alternatives with the following exceptions for both tribal concerns and cultural resources.

NLCS

Management of National Conservation Lands

1. **Planning Area–wide National Conservation Land Management Direction**
    - **Cultural Resources.** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. Resolution of adverse effects will in part be addressed via alternative mitigation that includes regional synthesis and interpretation of existing archaeological data in addition to mitigation measures determined through the Section 106 consultation process.

National Scenic and Historic Trails

Conservation and Management Actions for the Pacific Crest National Scenic Trail, and the Juan Bautista de Anza and Old Spanish National Historic Trails Management Corridors

- **Management Corridor Width.** Establish a National Trail Management Corridor, width generally 5 miles from centerline for the Pacific Crest Trail, and for high potential route segments and other known historically significant segments on the National Historic trails. Additional segments of the NSHTs may be added to the management corridor as information becomes available on their qualifications as high potential route segments.
- **Management of Trail Corridors.** Manage National Trails as components of the BLM's National Landscape Conservation System. Where National Trails overlap other National Conservation Lands, the more protective CMAs or land use allocations will apply. Within these areas, the BLM will support the nature and purposes of the designated National Trails.
- **Cultural Resources:** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 CFR Part 800.

IV.9.3.5.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

Under Alternative 3, tribal resources might benefit from increased protection of natural resources within conservation areas as well as from the CMAs defined previously. Proposed ACEC and NLCS designations could provide protection for tribal resources; disturbance caps in these areas are designed to conserve and protect the resource values, and renewable energy development would be limited in these designations. Development in NLCS lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACECs and wildlife allocations, whichever is more restrictive. These disturbance caps and other management actions would minimize surface disturbance and thereby provide protection for cultural resources of interest to tribes.

Under Alternative 3, the NAE acres that fall within conservation designations are shown in Table R2.9-13 (Appendix R2). With Alternative 3, 68% of NAE acres (1,558,590) would fall within conservation designations and would not be subject to renewable energy development. While important, NAE areas do not represent a complete list of places or areas important to tribes. Unidentified resources important to tribes may be present.

An estimated 226,319 (39%of all known archaeological and built-environment resources) resources are within conservation designations (see Table R2.8-19 in Appendix R2). The majority of the estimated archaeological and built-environment resources (170,759) occur within NLCS lands, with 92,311 on existing and proposed ACEC lands. In Alternative 3, the National Trail Management Corridor is 5 miles on either side of the centerline as illustrated in Figure IV.8-10, Chapter IV.8, Cultural Resources. As a result, an estimated 18,055 cultural resources would be protected. The number of cultural resources preserved by conservation designation type is shown in Table R2.8-19. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Due to their location within the conservation designations, resources in these areas would be less subject to impacts from renewable energy development.

IV.9.3.5.3 Impacts of Transmission Outside the DRECP Area

The impacts of transmission outside the DRECP area on tribal interests would be the same under all alternatives. These impacts are as described for the No Action Alternative in Section IV.9.3.1.4, Impacts of Transmission Outside the DRECP area in No Action Alternative.

IV.9.3.5.4 Comparison of Alternative 3 with Preferred Alternative

In this section, alternatives vary in two ways: by the presence or absence of NAE acres in the geographic areas of interest and potential impacts there, and by potential impacts to archaeological and built-environment resources in the same locations. Table IV.9-7 compares acres of NAE within the DFA footprints and the conservation designations for the Preferred Alternative and Alternative 3.

Comparison of Alternative 3 with the Preferred Alternative yields few definitive conclusions regarding impacts to tribal resources overall; however, the following conclusions regarding sensitive resources in NAE areas can be made:

- The Preferred Alternative would have a higher potential for impacts to sensitive resources on NAE lands than Alternative 3 because the Preferred Alternative has more NAE acres within the DFA footprints than Alternative 3.
- Alternative 3 would protect more NAE acres than Preferred Alternative because Alternative 3 contains more NAE acres within conservation designations.

Table IV.9-7
Comparison of Preferred Alternative with Alternative 3 – NAE Acres

Land Classification	Preferred Alternative NAE Acres	Alternative 3 NAE Acres
DFA	3,480	727
Conservation designation	1,274,665	1,558,590

Table IV.9-8 compares the Preferred Alternative with Alternative 3. The Preferred Alternative has the potential to affect more cultural resources in the DFA footprints than Alternative 3. In contrast, Alternative 3 would conserve more resources in conservation designations and more resources in NHT Management Corridors.

Table IV.9-8
Comparison of Preferred Alternative with Alternative 3 – Cultural Resources

	Preferred Alternative	Alternative 3
Number of resources in DFAs	6,587	5,719
Number of resources in Variance Process Lands	1,025	23
Number of resources in SRMA	59,773	68,163
Number of resources in NLCS	179,656	170,759
Number of resources in Existing and Proposed ACEC	126,755	92,311
Number of resources in Wildlife Allocation	733	519
Number of resources in LWCs	17,762	21,570
Number of resources in Trail Management Corridors	3,185	18,055
Number of resources conserved in Conservation Designations	224,673	226,319
NHT corridor width	2 miles on either side of centerline	5 miles on either side of centerline

Overall, Alternative 3 conserves more and protects more NAE acres. Therefore, Alternative 3 is more protective to NAE lands and cultural resources than the Preferred Alternative.

Geographic Distinctions

Under the Preferred Alternative and Alternative 3, the Silurian Valley would be a conservation designation. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, there is no difference between these alternatives.

Under the Preferred Alternative, the Hidden Hills area of Inyo County would be undesignated. Under Alternative 3, this location would be a conservation designation. Based on previous studies associated with a proposed solar project in this location, the Hidden Hills area is known to be very culturally sensitive because of the presence of a segment of the Salt Song Trail, Route 66, and an NSHT. In addition, there are NAE acres in this location (Figure III.9-1). Overall, Alternative 3 would protect more resources important to tribes in this location than the Preferred Alternative.

Under the Preferred Alternative, the Notch in the Park would be Variance Process Lands. Under Alternative 3, this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the area north of Tehachapi would be Variance Process Lands. Under Alternative 3, this location would be undesignated. The majority of this area consists of NAE acres (Figure III.9-1). Overall, for each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under the Preferred Alternative, the area east of Twentynine Palms would be Variance Process Lands. Under Alternative 3, this location would be undesignated. There are NAE acres in this location (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes.

Under both the Preferred Alternative and Alternative 3, Owens Lake would be a conservation designation. There are NAE acres in this location (Figure III.9-1), and dry lakes in this part of California are known to be very culturally sensitive. In addition, the Owens River Valley ecoregion subarea has the highest density of cultural resources of all of the DRECP ecoregion subareas (1.76 resources per acre). Overall, both alternatives would protect resources important to tribes in this location equally.

Under both the Preferred Alternative and Alternative 3, Searles Lake between Fort Irwin and China Lake would be a DFA. Under Alternative 3, this location would be a DFA. There are NAE acres in this location (Figure III.9-1). Therefore, both alternatives could have similar potential negative impacts to resources important to tribes in this location.

Under the Preferred Alternative, the area along U.S. Route 395 north of Edwards Air Force Base would be a DFA. Under Alternative 3, this location would be a conservation

designation. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, Alternative 3 would be more likely to preserve resources important to tribes in this location than the Preferred Alternative.

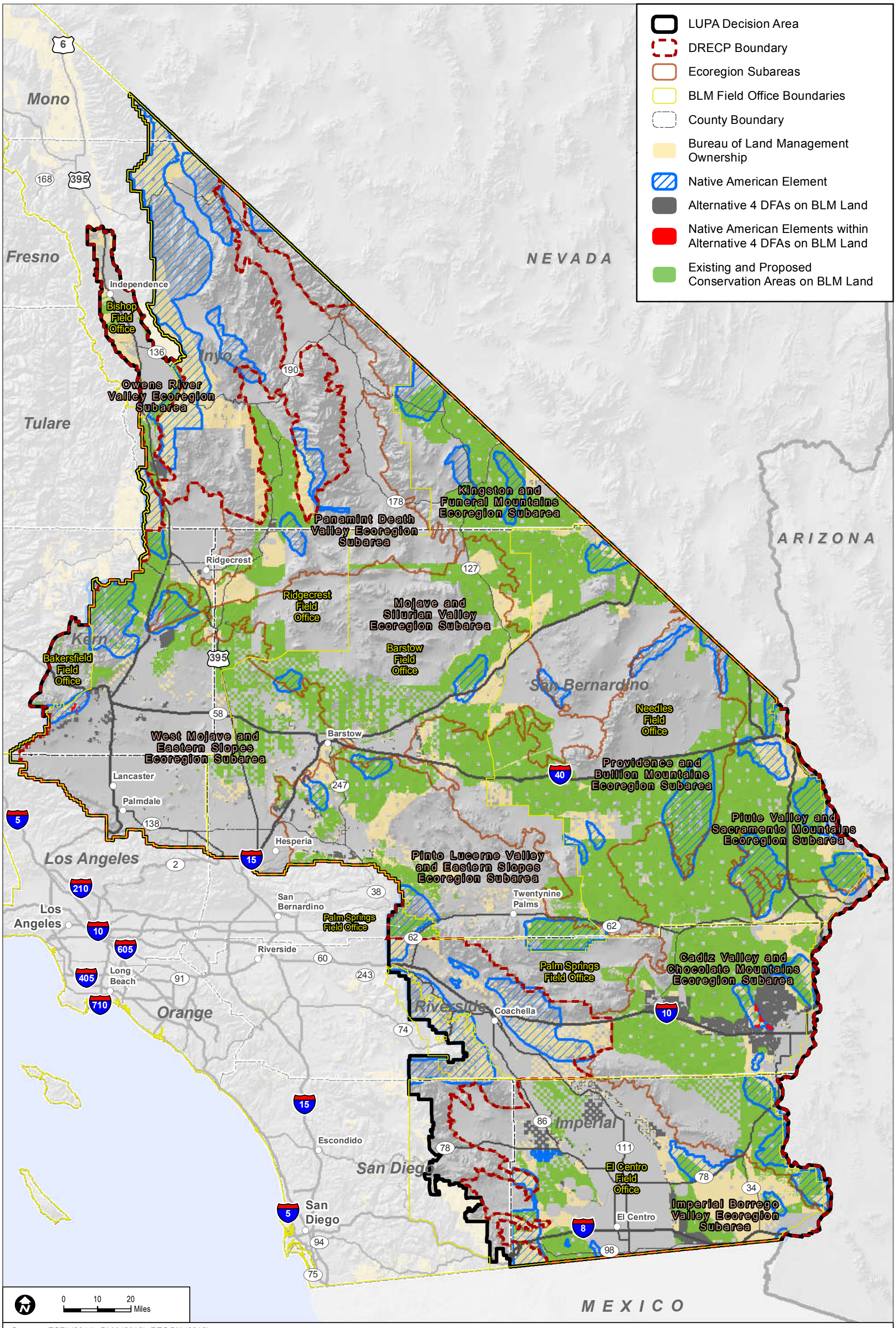
IV.9.3.6 Alternative 4

IV.9.3.6.1 Impacts of Renewable Energy and Transmission

The general issues of concern to tribes related to renewable energy development for Alternative 4 are the same as those described in Section IV.9.2.1 for Typical Impacts, and in Section IV.9.3.1.1, for the No Action Alternative. Alternative 4 could directly impact culturally important resources on 1,973 acres of lands classified as NAEs. Figure IV.9-6, Native American Element (Identified in the 1980 CDCA Plan), Alternative 4, illustrates the location of NAEs and the components of Alternative 4. Alternative 4 could also impact an estimated 7,862 cultural resource sites (Appendix R2, Table R2.9-17 and Table R2.8-21). Figure IV.8-11, in Chapter IV.8, Cultural Resources, illustrates the estimated number of cultural resources within Alternative 4 DFAs by DRECP ecoregion subarea.

While NAE designated lands and cultural resource sites are important, the metrics listed in the previous paragraph do not represent a complete list of places or areas important to tribes in the DRECP area. The identification, evaluation, and treatment of resources important to tribes would need to be conducted on a project-specific level to ensure that any unidentified resources are taken into account.

Under Alternative 4, an estimated 7,862 archaeological and built-environment resources would fall within DFAs (see Table R2.8-21 in Appendix R2). This represents approximately 1.5% of the estimated cultural resources within the LUPA Decision Area. The number of cultural resources impacted by technology type are shown in Table R2.8-21. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Each impact's description follows.



Sources: ESRI (2014); BLM (2015); RECON (2015)

FIGURE IV.9-6

Native American Element (Identified in the 1980 CDCAP), Alternative 4

M:\JOBS4\6287\common_gis\EIS_Figures_Spring_2015\Vol IV\9_NAE\figIV.9-6.mxd 9/18/2015

INTENTIONALLY LEFT BLANK

Impacts TL-1 (Disproportionate effect resources of cultural and spiritual importance to tribes) and TL-2 (Costs associated with the participation in environmental documents would be disproportionately borne by tribal governments and organizations)

As described in Section IV.9.2, all phases of renewable energy development under all of the alternatives could affect resources of cultural and spiritual importance to tribes and disproportionately impact tribal governments and organizations.

Impacts in Variance Process Lands

Variance Process Lands are areas that would be open for solar, wind, and geothermal energy applications under the Proposed LUPA but need to follow a variance process before BLM would determine whether to continue with processing them. These lands would be subject to the DRECP LUPA PA. Development in any of the Variance Process Lands could adversely impact resources important to tribes and other communities.

Under Alternative 4, a total of 576,929 acres would be Variance Process Lands. This area is predicted to contain 46,353 archaeological and built-environment resources (Appendix R2.9 Table R2.8-22). These lands overlap with 60,600NAE acres. This area is predicted to contain 1,214 archaeological and built-environment resources.

Impact Reduction Strategies

The implementation of the Proposed LUPA would result in conservation of some desert lands as well as the development of renewable energy generation and transmission facilities on other lands. The impacts of the renewable energy development covered by the Proposed LUPA would be lessened in several ways. First, the Proposed LUPA incorporates CMAs for each alternative, including specific cultural resources protections. Also, the implementation of a NHPA Section 106 PA with the ACHP and the California SHPO and existing laws, orders, regulations, and standards would reduce the impacts of project development. The most recent version of the PA is available online at www.drecp.org.

Design Features of the Solar PEIS

The design features of the Solar PEIS for cultural resources would be the same under all alternatives. These design features are as described for the No Action Alternative in Section IV.9.3.1.1. The DRECP LUPA PA would replace the Solar PA for renewable energy projects within the LUPA Decision Area. The most recent version of the PA is available online at www.drecp.org.

Conservation and Management Actions

The conservation strategy for Alternative 4 (presented in Volume II, Section II.7.4. defines specific actions that would reduce the impacts of this alternative. The conservation strategy includes definition of the conservation designations and specific CMAs detailed in the Preferred Alternative. The CMAs would be the same under all alternatives with the following exception for both tribal concerns and cultural resources.

NLCS

Management of National Conservation Areas

1. **Planning Area–wide National Conservation Land Management Direction**
    - **Cultural Resources.** Any adverse effects to historic properties resulting from allowable uses will be addressed through the Section 106 process of the National Historic Preservation Act and the implementing regulations at 36 Code of Federal Regulations (CFR) Part 800. Resolution of adverse effects will in part be addressed via compensatory mitigation that includes either protection of resources of importance to tribes or acquisition of comparable sites into public ownership similar to those that are going to be destroyed.

National Scenic and Historic Trails

Conservation and Management Actions for the Pacific Crest National Scenic Trail, and the Juan Bautista de Anza and Old Spanish National Historic Trails Management Corridors

- **Management Corridor Width.** Establish a National Trail Management Corridor, width generally 1 mile from centerline of the trail.
- **Management of Trail Corridors.** Manage National Trails as components of the BLM's National Landscape Conservation System. Where National Trails overlap other National Conservation Lands, the more protective CMAs or land use allocations will apply. Within these areas, the BLM will support the nature and purposes of the designated National Trails.

IV.9.3.6.2 Impacts of Ecological and Cultural Conservation and Recreation Designations

Under Alternative 4, tribal resources might benefit from increased protection of natural resources within conservation areas as well as from the CMAs defined above. Proposed ACEC and NLCS designations could provide protection for tribal resources; disturbance caps in these areas are designed to conserve and protect the resource values, and renewable

energy development would be limited in these designations. Development in NLCS lands would be limited to 1% of total authorized disturbance, or to the level allowed by collocated ACEC and wildlife allocations, whichever is more restrictive. These disturbance caps and other management actions would minimize surface disturbance and thereby provide protection for cultural resources.

Under Alternative 4, the NAE acres within conservation designations are shown in Table R2.9-17 (Appendix R2). With Alternative 4, 68% of NAE acres (1,520,397) would fall within conservation designations and would not be subject to renewable energy development. While important, NAE areas do not represent a complete list of places or areas important to tribes. Unidentified resources important to tribes may be present.

An estimated 195,263 (34%of all known archaeological and built-environment resources) resources would fall within conservation designations (see Table R2.8-23 in Appendix R2). The majority of the estimated archaeological and built-environment resources (127,218) occur within the NLCS lands. In Alternative 4, the National Trail Management Corridor is 1 mile on either side of the centerline as illustrated in Figure IV.8-12 (in Chapter IV.8, Cultural Resources). This area would contain an estimated 7,165 archaeological and built-environment resources. The number of cultural resources preserved by conservation designation type is shown in Table R2.8-23. Traditional cultural properties and landscapes are not included in this calculation as these types of resources are not part of the dataset used to quantify cultural resources. Impacts to these resources are therefore characterized in a more qualitative manner in this document. Due to their location within the conservation designations, resources in these areas would be less subject to impacts from renewable energy development.

IV.9.3.6.3 Impacts of Transmission Outside the DRECP Area

The impacts of transmission outside the DRECP area on tribal interests would be the same under all alternatives. These impacts are as described for the No Action Alternative in Section IV.9.3.1.4, Impacts of Transmission Outside the DRECP area in No Action Alternative.

IV.9.3.6.4 Comparison of Alternative 4 with Preferred Alternative

In this section, alternatives are compared in two ways: by the presence or absence of NAE acres in the geographic areas of interest and potential impacts there, and by the potential impacts to archaeological and built-environment resources in these same locations.

Table IV.9-9 compares NAE acres within the DFA footprints and the conservation designations for the Preferred Alternative and Alternative 4. Comparison of Alternative 4 with the Preferred Alternative yields few definitive conclusions regarding impacts to tribal

resources overall; however, the following conclusions regarding sensitive resources in NAE areas can be made:

- Alternative 4 has a lower potential for impacts to sensitive resources on NAE lands than Preferred Alternative as Alternative 4 contains fewer NAE acres within the DFA footprints than the Preferred Alternative.
- The Alternative 4 would protect more NAE acres than the Preferred Alternative as Alternative 4 contains more NAE acres within conservation designations.

Table IV.9-9
Comparison of Preferred Alternative with Alternative 4 – NAE Acres

Land Classification	Preferred Alternative NAE Acres	Alternative 4 NAE Acres
DFA	3,480	1,973
Conserved in conservation designations	1,274,665	1,520,397

Table IV.9-10 compares the CMAs and number of cultural resources for the Preferred Alternative and Alternative 4. The Preferred Alternative would impact fewer cultural resources in the DFA footprints than Alternative 4. The Preferred Alternative would also conserve more resources in conservation designations and more resources in the NHT Management Corridors. While the number of resources conserved by each type of BLM land designation vary, cultural resources CMAs apply to NLCS, ACECs, and trail management corridors and so the importance of those designations are emphasized here.

Table IV.9-10
Comparison of Preferred Alternative with Alternative 4 – Cultural Resources

	Preferred Alternative	Alternative 4
Number of resources in DFAs	6,587	7,862
Number of Resources in Variance Process Lands	1,025	46,353
Number of resources in SRMA	59,773	69,700
Number of resources in NLCS	179,656	127,218
Number of resources in ACEC	126,755	91,862
Number of resources in wildlife allocation	733	10,140
Number of resources in LWCs	17,762	10,288
Number of resources in trail management corridors	3,185	7,165
NHT corridor width	2 miles on either side of centerline	1 mile on either side of centerline
Total number of resources conserved in Conservation Designations	224,673	195,263

Overall, Alternative 4 conserves more NAE Acres. In contrast, more cultural resources would be conserved in the Preferred Alternative. Therefore the Preferred Alternative is less protective to resources important to tribes than Alternative 4.

Geographic Distinctions

Under the Preferred Alternative, the Silurian Valley would be a conservation designation. Under Alternative 4, this location would be Variance Process Lands. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, the Preferred Alternative would be more protective of resources important to tribes in this location.

Under the Preferred Alternative, Hidden Hills area would be undesignated. Under Alternative 4, this location would be a DFA and Variance Process Lands. Based on previous studies associated with a proposed solar project in this location, the Hidden Hills area is known to be very culturally sensitive because of the presence of a segment of the Salt Song Trail, Route 66, and an NSHT. In addition, there are NAE acres in this location (Figure III.9-1). As the Preferred Alternative has the potential to be conserved or developed, it could protect a greater number of cultural resources than Alternative 4.

Under the Preferred Alternative, the Notch in the Park would be Variance Process Lands. Under Alternative 4, this location would be undesignated. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes in this location.

Under the Preferred Alternative, the area north of Tehachapi would be Variance Process Lands. Under Alternative 4, this location would be undesignated. The majority of this area consists of NAE acres (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes in this location.

Under both the Preferred Alternative and Alternative 4, the area east of Twentynine Palms would be Variance Process Lands There are NAE acres in this location (Figure III.9-1). In each alternative, this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes in this location.

Under the Preferred Alternative, Owens Lake would be a conservation designation. Under Alternative 4, this location would be Variance Process Lands. There are NAE acres in this location (Figure III.9-1), and dry lakes in this part of California are known to be very culturally sensitive. In addition, the Owens River Valley ecoregion subarea has the highest

density of cultural resources of all the DRECP subareas (1.76 resources per acre). Therefore, the Preferred Alternative would be more protective of resources important to tribes in this location.

Under both the Preferred Alternative and Alternative 4, Searles Lake between Fort Irwin and China Lake would be undesignated. There are NAE acres in this location (Figure III.9-1). In each alternative this location could either be developed or conserved, therefore there is no difference between the alternatives for resources important to tribes in this location.

Under the Preferred Alternative, the area along U.S. 395 north of Edwards Air Force Base would be a DFA. Under Alternative 4, this location would be a conservation designation. No NAE acres have been identified in this location (Figure III.9-1); however, that does not mean that no resources important to tribes are present. Therefore, Alternative 4 would protect more resources important to tribes in this location than the Preferred Alternative.